

Strategic Plan

January 2017 to December 2019

Version 1.1

May 25, 2017

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Message from the Director



The San Antonio Metropolitan Health District (Metro Health) team worked diligently over the last year to develop this three-year strategic plan. The plan encompasses Metro Health's broad range of work. It incorporates both traditional public health services such as communicable disease prevention and health inspections, as well as innovative programs addressing the social determinants of health in our community, including neighborhoods and the built environment, health equity and improving access to health care within the social and community context. The implementation of the strategic plan will continue to move Metro Health forward in achieving our vision of *healthy people thriving in a healthy community*.

The headline indicators reflect the highest-priority issues that we are committed to addressing over the next three years and ensure measurement, accountability and alignment of our resources and efforts to support public health priorities in our community.

Under the leadership of Dr. Vincent Nathan, Metro Health's Interim Director during the development of this plan, the final product is a thoughtfully developed strategic plan that ensures alignment with Metro Health's core functions as well as with our vision, mission and values. Now, as we embark on this journey, our goal will be continued quality improvement while we to strive to improve the health of our communities across San Antonio and Bexar County.

I extend my heartfelt thanks to Dr. Nathan and the dedicated Metro Health staff who engaged in this effort and work every day to improve the health of the San Antonio community. By providing excellent services and developing and implementing innovative policy, environmental and systems changes, Metro Health staff continues to strive for excellence. This strategic plan will help us better serve the people of San Antonio and Bexar County as we continue our mission-driven, high-impact Public Health work.

Colleen M. Bridger, MPH, PhD

alla Bush

Director

Executive Summary

This Strategic Plan—Metro Health's road map through December 2019—was based on months of listening, learning and debating among ourselves in six facilitated work groups, with input from our more than 350 employees and our key community partners.

Two themes kept recurring, with nearly every health indicator. These became the Overarching Approaches discussed on p. 9: Health Equity and Access to Health Care. Not everybody has the same opportunities and as a result, the most vulnerable members of our community are apt to have worse health outcomes. Whether we talked about diabetes or deaths of infants, tuberculosis or tooth decay, we persistently circled back to health inequities in San Antonio and Bexar County, and how Metro Health must work collaboratively with stakeholders and community members across multiple sectors to improve population health.

The bulk of this document walks you through our six areas of focus: Chronic Disease Prevention; Communicable Disease; Environmental Health and Safety; Maternal, Child and Teen Health; Oral Health; and Infrastructure.

At every step of the Strategic Plan process, we let the data guide us: What are our community's needs? Where are the biggest health disparities? Our data and the 2016 Community Health Needs Assessment told us what health indicators to choose. For example, after years of focusing on teen pregnancy, we pivot this year to repeat teen births because while teen births overall have declined impressively, repeat teen births have not. About 22% of teen births are repeat births, a proportion that has budged little since 2010. Also in the area of Maternal, Child and Teen Health, infant mortality is dramatically increasing in the African-American community even as it is falling among other races and ethnicities.

Some health indicator areas were prioritized because of national trends. Syphilis and tuberculosis are rising across the United States, alerting us that more than ever we need to keep our guard up. Use of seven core childhood vaccines has stagnated across the country, with about 1 in 5 children incompletely immunized. Texas rates also remain below the national average.

Unfortunately, in many cases local health trends are worse than what we see nationally. Diabetes and obesity rates continue to climb and will take years if not decades of concerted effort to improve. Too many pregnant women in our community begin their prenatal care late. Our preschool children are twice as likely to experience cavities as the average U.S. child. Salmonella infections, which often are food-borne, occur at a higher rate locally than nationally.

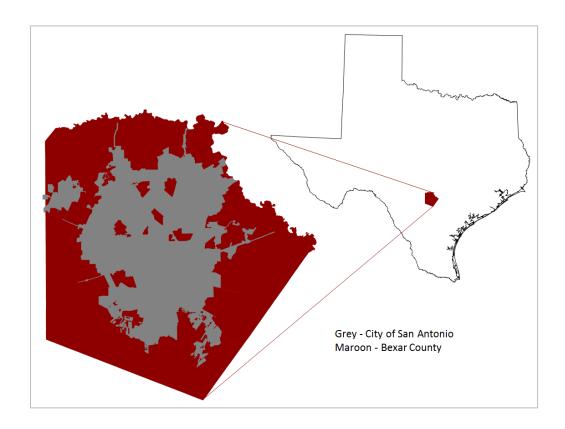
San Antonio and Bexar County recently exceeded the Environmental Protection Agency (EPA) standard for ozone. It is expected that EPA will declare San Antonio in nonattainment for ozone in October 2017. This change will bring notable economic and health consequences for the entire community. With this nonattainment designation we will be required to improve air quality to attainment levels within three years or face additional more stringent regulations.

Finally, we include a section on Infrastructure. This is a new area for Metro Health that includes formalizing our use of data-driven decision making, ensuring continuous quality improvement, developing the public health workforce and making the most of information technology.

We are proud of the achievement that this document represents, are grateful to our staff and stakeholders for their partnership, and look forward to working energetically together to improve the health of all of San Antonio and Bexar County.

Snapshot of Population Served: Bexar County and City of San Antonio

The City of San Antonio is the seventh largest city in the United States (US) and is located in south central Texas, seated within Bexar County. San Antonio is 143 miles from both the Gulf of Mexico and the Mexico border. Leading industries are health care/biosciences, education, the military, and a hospitality industry that draws 31 million tourists a year. The city is a vibrant, diverse metropolis which serves its residents, visitors and those doing business within the city and the county.



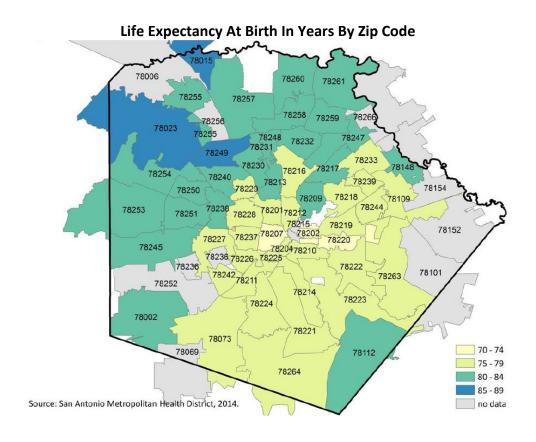
An estimated 1.9 million people lived in Bexar County in 2015, a 36% increase from the year 2000. An additional 1.1 million people are expected by the year 2040. In 2015, 59.5% of people in Bexar County were Hispanic, 29% non-Hispanic white and 7% non-Hispanic African-American, making this area one of the first majority minority large cities in the country. About 13% were foreign born. Of the 1.9 million people, 64% were born in Texas.¹

Bexar County's median age was 33.1 years, which was lower than those of Texas (34.1 years) and the United States (37.6 years). The education level of the population in 2015 showed that 83% of people 25 years and over had at least graduated from high school. Twenty-seven percent of the population had a bachelor's degree or higher. An estimated 17% of the population did not complete high school. The median income of households in Bexar County was \$51,150, lower than both Texas (\$53,207) and the US (\$53,889); and 17% lived below the Federal Poverty Level in 2015. This burden falls disproportionately on children, who made up nearly 25% of those living in poverty.²

Among the civilian non-institutionalized population in Bexar County in 2015, 18% had no health insurance coverage; this is less than in Texas (21%) but more than in the United States (13%). For those under 18 years of age, 9% had no health insurance coverage; this is also less than in Texas (12%) but more than in the United States (6%).²

In 2015, of those at least five years of age living in Bexar County, 41% spoke a language other than English at home; this is more than both Texas (35%) and the US (21%). The majority (91%) of this population spoke Spanish, and the remaining 9% spoke some other language.²

Large gaps exist between our affluent and poor neighborhoods in household income, employment, education and projected lifespan. Most strikingly, the difference in life expectancy between people living in far northwest Bexar County and those in the central areas is as high as 19 years, clearly demonstrating that built space and the social environment have a direct impact on residents' health.³ (See Life Expectancy by Zip Code map below.) The San Antonio-New Braunfels area was ranked the most income-segregated major metropolis in the nation in 2010 by the Pew Research Center.⁴ Our goal in public health is to level the playing field and create healthy, resilient communities for all in San Antonio and Bexar County.



- U.S. Census Bureau 2015 American Community Survey 1-Year Estimates. Retrieved from https://www.census.gov/quickfacts/table/PST045215/48029/accessible
- 2. U.S. Census Bureau 2011-2015 American Community Survey 5-Year Estimates. Retrieved from http://thedataweb.rm.census.gov/TheDataWeb_HotReport2/profile/2015/5yr/np01.hrml?SUMLEV=50&county=029&state=48
- 2016 Bexar County Community Health Needs Assessment (CHNA). The Health Collaborative. Retrieved from http://healthcollaborative.net/chna/the-2016-chna-report/
- 4. Taylor P, Fry R. (2012.) The rise of residential segregation by income. Pew Research Center, Washington, D.C. Retrieved from http://www.pewsocialtrends.org/files/2012/08/Rise-of-Residential-Income-Segregation-2012.2.pdf

Overview of Metro Health

"Public health is the science of protecting and improving the health of families and communities through promotion of healthy lifestyles, research for disease and injury prevention and detection and control of infectious diseases." —The Centers for Disease Control and Prevention Foundation

Public Health focuses on protecting the health of populations, from a local neighborhood to a region of the world. A framework for Essential Public Health Services was developed by a federally convened committee in 1994. committee identified three core areas of public health: assessment. policy development and assurance. Within those three areas, they identified ten essential services of public health, as seen in the figure on the right. These services include preventing epidemics and the spread of protecting and disease, encouraging healthy behaviors, responding to disasters and assisting communities in recovery, and assuring the quality and accessibility of services.2



The San Antonio Metropolitan Health District (Metro Health) is designated by State Law, City Code, and County Resolution with responsibility for the public health of San Antonio and unincorporated areas of Bexar County. While Metro Health serves as a City-County Health District, the organization is administered by the City of San Antonio under the direction of the City Manager, Mayor and City Council. Major Metro Health services include: regulatory functions; environmental monitoring; health code enforcement; preventive health services including chronic disease prevention; clinical and laboratory services; communicable disease control; dental health; maternal, child and infant health; health education and community outreach; teen pregnancy prevention; violence prevention; neighborhood engagement; health equity; and emergency planning and response for natural and manmade disasters.

Metro Health functions under the leadership of a Public Health Director. The director, in consultation with the City Manager, Mayor and City Council sets public health priorities and guides the overall activities of Metro Health. Metro Health's Leadership Team and the programs and services they oversee are shown in the organizational chart on the next page.

Logo

The Metro Health logo incorporates a national public health agency logo developed by the National Association of County and City Health Officials (NACCHO). This three-pointed shield and stylized plus symbol "have universal recognition associated with health, with protection and with growth." The tag line that NACCHO developed, "promote, prevent, protect" is also utilized in Metro Health marketing as a simple statement about what public health does and achieves. The Metro Health logo is enclosed in a quatrefoil, a symbol incorporated in the logos of all Departments of the City of San Antonio.

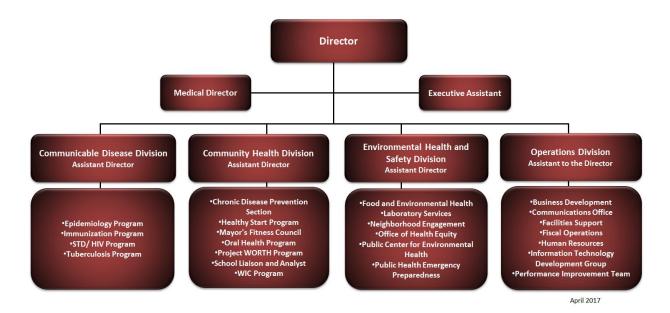




Metro Health logo:

Logo developed by NACCHO:

Organizational Chart



Vision, Mission and Core Values

Vision:

Healthy people thriving in a healthy community

Mission:

To prevent illness, promote healthy behaviors, and protect against health hazards throughout our community through education, collaboration and key services.

City of San Antonio Core Values:

1) Teamwork 2) Integrity 3) Innovation 4) Professionalism

- 1. What is public health? Centers for Disease Control and Prevention Foundation. Retrieved from http://www.cdcfoundation.org/content/what-public-health
- 2. The public health system and the 10 essential public health services. Centers for Disease Control and Prevention, National Public Health Performance Standards. Retrieved from http://www.cdc.gov/nphpsp/essentialServices.html
- 3. Build visibility for your health department. National Association of County and City Health Officials. Retrieved from http://archived.naccho.org/advocacy/marketing/nationalidentity/whybrand.cfm

Overarching Approaches within Metro Health

Achieving Health Equity

A basic principle in public health is that all people have a right to health. Differences in health conditions and health status between groups are commonly referred to as health disparities. Most health disparities affect groups marginalized because of income level, race/ethnicity, sexual orientation, gender, age, immigration status, geographic location, or some combination of these. People in such groups not only experience worse health but also tend to have less access to life-enhancing resources, such as healthy food, good housing, effective education, safe neighborhoods, transportation, and social relationships that support health. Health disparities are referred to as health inequities when they are the result of the systematic and unjust distribution of these critical conditions. Health Equity is achieved when every person has the opportunity to "attain his or her full health" potential regardless of socioeconomic circumstances. Health inequities are reflected in differences in length and quality of life; rates of disease, disability, and death; severity of disease; and access to treatment.

Metro Health recognizes that addressing the social determinants of health is a necessary first step in improving population health and in achieving health equity. Several of the health indicators within the plan focus on health equity within populations that have experienced greater disparities and inequities in health outcomes. Metro Health strives to integrate an understanding of health equity across all programs and services and thus established an Office of Health Equity in early 2017. This new office will work to implement policies and provide community-based programs and services to ensure all people in Bexar County have the opportunity to reach their full health potential.

The following selected strategies from the strategic plan provide examples of how health equity will be woven into our programs and services:

- ensure a well-trained and culturally competent workforce;
- increase and expand the Diabetes Prevention Program in community settings with a focus on Hispanics, Latinos and African Americans;
- and increase safe sleep environments for infants thorough home visits and community education with focused efforts on African American families.



Access to Health Care

One in four San Antonians lacked health insurance in 2014, and about one in five postponed care in the last year because of cost.⁴ The uninsured and underinsured are less likely to obtain medical and dental preventive care, and more likely to be diagnosed in later stages of disease. Uninsured women start prenatal care later. All these impacts fall most heavily on the Hispanic or Latino and African-American communities.

While affordability is a major barrier to care, it is not the only one. To access health care, a person needs to first perceive that care is needed, know where to find it, make time (usually during a workday), have transportation, and sometimes overcome language barriers and insurance hurdles. Parents may need to find child care. People of color and members of the lesbian, gay, bisexual, transgender and queer (LGBTQ) community may fear encountering bias.

For these reasons, Metro Health takes a broad approach to the problem of healthcare access. At an individual level, all clients are served regardless of ability to pay. We have an employee dedicated to finding and helping HIV patients who drop out of care. Case managers and community health workers

throughout the department connect their clients to health services. Our school oral health program and new Sexually Transmitted Disease (STD) mobile unit go directly into the most underserved communities, as do all our outreach workers.

At the community level, we educate policy makers about how the built environment and transportation are connected to health equity. Collaboration with the March of Dimes and community physicians will enhance access to prenatal care city wide. Our medical director talks to community physicians about health disparities and LGBTQ-friendly healthcare. Each year during the period of time that people can enroll in a health insurance plan, Metro Health works closely with EnrollSA and the Bexar County Health Collaborative to promote coverage.

The following selected strategies from the strategic plan provide examples of how access to health care will be woven into our programs and services:

- increase healthcare coverage among reproductive age women by expanding partnerships with EnrollSA and city agencies;
- improve access to oral health care by educating parents about how to access or remain enrolled in Medicaid, CHIP or private insurance for oral health services;
- and expand syphilis treatment in nontraditional settings, such as in the mobile unit or homes.



- 1. Mann J, Gruskin S, Grodin M, Annas G. (1999). Health and human rights: a reader. New York: Routledge.
- 2. Braveman, P. (2006) Health disparities and health equity: concepts and measurement. Annual Review of Public Health, 27, 167–194.
- 3. Whitehead M, Dahlgren G. Leveling up (part 1): a discussion paper on concepts and principles for tackling social inequities in health. World Health Organization. Retrieved from http://www.euro.who.int/document/e89383.pdf.
- 4. Texas Department of State Health Services, Center for Health Statistics. Texas Behavioral Risk Factor Surveillance System (BRFSS). 2011-2014. [Data set].

The Strategic Planning Process

Metro Health's strategic planning process began in April 2016 with the selection of Results Based Accountability (RBA) as the guiding framework to develop, implement, and evaluate our strategic plan. RBA is a "disciplined way of thinking and taking action used by communities to improve the lives of children, families, and the community as a whole." The two components of RBA are Population Accountability and Performance Accountability. Population accountability is used to address the well-being of a population within a specific geographic area—in this case, San Antonio and Bexar County. Performance accountability is used to assess how well a program, agency or, service system is working and will be addressed in a separate internal plan. Metro Health is creating two documents, one for each of these components. This document describes population accountability, with our headline indicators and strategies. The second document will be utilized by Metro Health to track performance accountability through monitoring performance measures and actions.

This Strategic Plan is our compass for the next three years, guiding the work that we do and steering our efforts to provide quality services to Bexar County residents. With this plan, we are positioning ourselves to not only sustain critical programming, but to effectively address the public health needs of our community.

Selecting Priority Areas and Headline Indicators

When asked to name the public health issues which would matter most in Bexar County in the next three years, our staff brainstormed dozens of answers drawing on their knowledge, the Essential Public Health Services, as well as information in the 2013 Community Health Assessment (CHA) and information prepared for the 2016 Community Health Needs Assessment (CHNA).² The 2016 CHNA was still being finalized at that time. Other local plans such as the SA2020 Plan and the SA Tomorrow Plan, the City's Comprehensive Plan, were also carefully reviewed and considered.

Surveys of staff and stakeholders, as well as an analysis of strengths, weakness, opportunities and threats (SWOT), a close look at current health data and consideration of Metro Health's leadership priorities guided the development of an initial lengthy list of potential priority areas. Ultimately we decided to focus our efforts on six categories. These became our Priority Areas—Chronic Disease Prevention; Communicable Disease; Environmental Health and Safety; Maternal, Child and Teen Health; Oral Health; and Infrastructure.

Next, we formed priority area workgroups that included a cross section of Metro Health employees which included departmental subject matter experts. Each workgroup had two co-chairs who led their groups in data collection, headline indicator selection, root cause analysis, and development of short and long term strategies. Several large group meetings were also conducted to allow for sharing and feedback.

Our workgroups researched evidence based best practices across the nation and within our community. They sought input from community partners throughout this process. They also referred to the 2014 Community Health Improvement Plan (CHIP) throughout this process. Many of our priority areas and strategies directly correlate with the five focus areas of the 2014 CHIP: (1) Healthy Eating and Active Living, (2) Healthy Child and Family Development, (3) Safe Communities, (4) Behavioral and Mental Well-Being, and (5) Sexual Health.

As you read about each Priority Area, you will find two to three Headline Indicators that were selected. Most of these Headline Indicators are graphed, displaying local baseline data in blue with a dotted green line forecasting what we expect the data trend will look like without additional intervention. When possible, we provide a red comparison line that displays a national goal or national data. We preferred to

display the national Healthy People 2020 target. When that was not available, we displayed national data for that indicator. We also provide a story behind the data specific to Bexar County and the various health factors that affect our residents. The headline indicators reflect the highest-priority issues that programs are committed to addressing over the next three years and ensure measurement, accountability and alignment of our resources and efforts to support public health priorities in our community. Finally, we provide a list of key strategies that directly connect to the prioritized root causes identified by our workgroups.

We believe the final product is a thoughtfully developed strategic plan that ensures alignment with Metro Health's core functions as well as with our vision, mission and values.

Prioritized Indicators

In early April 2017, over eighty staff from across Metro Health met with our new director to further prioritize the headline indicators. This vetting process resulted in a prioritization of five of the fourteen health indicators and one of the three internal indicators. These prioritized indicators are listed below and identified with a star in the plan.

Prioritized Health Indicators:

- Obesity in Adults
- Obesity in Children
- Type 2 Diabetes in Adults
- Ozone Levels
- Immunizations for Vaccine Preventable Diseases in Children

Prioritized Internal Indicator:

Agency Wide Performance Management and Quality Improvement

These indicators reflect the highest-priority issues for Metro Health's work in the community and within our agency over the next three years.





Highlighted Strategies

Throughout our strategic plan we have highlighted the strategies that directly link to the 2014 CHIP. These linkages will be identified using the visual below.



Community Health Improvement Plan:

Monitoring and Evaluation

Continuous improvement of public health services is essential to ensuring optimum efficiency and effectiveness within Metro Health, as well as health equity within our community. Metro Health has created a Performance Management Committee (PMC) to build internal Quality Improvement (QI) capacity and ensure alignment of the Strategic Plan with department priorities, strategies, and the Community Health Improvement Plan (CHIP). With support from the Performance Improvement Team, Metro Health Program Managers will deliver quarterly performance reports to the PMC in order to monitor progress of Strategic Plan strategies, performance measures and actions. A yearly report will also be submitted to the PMC to evaluate areas for improvement. Annually, the PMC may decide to make revisions to the strategic plan, if necessary. These revisions will be tracked in the revision history table in Appendix A.

- 1. Friedman, M. (2005). Trying hard is not good enough: how to produce measurable improvements for customers and communities. Trafford.
- 2. Bexar County Health Collaborative. Community Health Needs Assessments (2013, 2016) and Community Health Improvement Plan (2014). Retrieved from http://healthcollaborative.net/reports/







Priority Area: Chronic Disease Prevention

Why is this Important?

Chronic diseases such as type 2 diabetes, obesity and heart disease are preventable for many individuals. Metro Health is committed to implementing proven strategies that address the main risk factors of these diseases: poor nutrition and physical inactivity. Making policy, systems and environmental changes in public places, worksites, schools, and government institutions can have lasting impact on improving food and beverage choices and increasing access to safe opportunities to engage in physical activity in our city. With a keen focus on reducing the rates of adult type 2 diabetes, and adult, childhood and youth obesity, Metro Health strives to create a community that values healthy choices and advocates for positive change.

Results Statement

People are able to prevent and manage chronic diseases such as diabetes, obesity and heart disease.

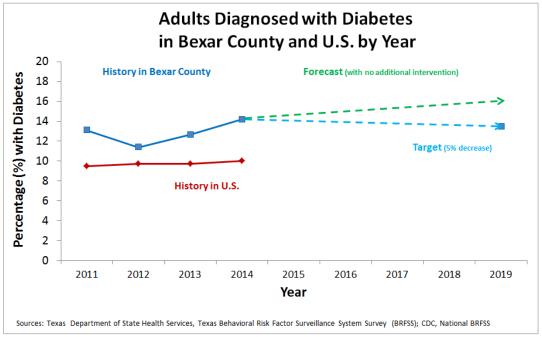
Type 2 Diabetes in Adults



Chronic Disease

Introduction

In 2014, 14.2% of Bexar County adults had been diagnosed with diabetes mellitus (type 1 or 2)¹, which is 1.3 times higher than Texas as a whole (11.0%) and 1.4 times higher than the national average (10.0%).² It is projected that the number of Americans with diabetes will double or triple by 2050 if current trends continue.³ The fight against type 2 diabetes must be a two-pronged approach that focuses on preventing new cases of diabetes and better managing existing cases.



Please see Appendix D for updated graph.

Story Behind the Baseline

Diabetes is a disease that occurs when glucose (sugar) builds up in the blood. This increase in blood glucose is caused by problems with insulin, a hormone that helps the body use glucose. Common types of diabetes include type 1, type 2, and gestational diabetes. Uncontrolled levels of glucose in the blood may lead to serious health complications such as heart disease, stroke, kidney disease, and blindness, as well as amputations of the legs and feet and early death.

San Antonio is suffering from a diabetes epidemic—one that touches the lives of almost everyone in our community. The percent of Bexar County adults that were diagnosed with diabetes increased by 24.6%, from 11.4% in 2012 to 14.2% in 2014; this data includes only those who had been told by their doctor that they had diabetes. Metro Health estimates that the adult diabetes rate is closer to 35%, with many individuals unaware that they have the disease. One in eight (12.5%) Bexar County adults has been told by a doctor that they have an elevated risk for diabetes (pre-diabetes). Risk factors for type 2 diabetes include being an older adult, being overweight or obese, being Hispanic or non-Hispanic African-American, having a family history of diabetes, engaging in low levels of physical activity, being a woman who had gestational diabetes, or being pre-diabetic.

The root causes of type 2 diabetes include biological characteristics and behavioral influences as well as physical and social environments.^{4,5} Social determinants, such as low income and education, poor housing, and

limited access to healthy food and safe places to be physically active, are central to the development and progression of type 2 diabetes. In San Antonio, people with an annual income below \$25,000 and only some high school education have higher rates of type 2 diabetes.

Fortunately type 2 diabetes can be prevented by targeted activities. Metro Health implements the Stanford Diabetes Self-Management program (DSMP), for those diagnosed with diabetes, and also funds the YMCA of Greater San Antonio to implement the Y Diabetes Prevention Program (YDPP), for those at risk of diabetes, and the Y Living Program, a family diabetes prevention program. The YMCA and Metro Health provide these programs throughout the community with a particular focus in communities at highest risk. Metro Health's goal is to continue to increase the number of individuals we can serve through all of these programs.

Recognizing the complexity of the challenge of reducing type 2 diabetes, Metro Health has convened the San Antonio Diabetes Collaborative. This Collaborative is using the Collective Impact Model, bringing organizations from different sectors and community members together who agree to solve a special social problem using a common agenda, aligning their efforts, and using common measures of success. In this instance, our aim is to prevent the increase of type 2 diabetes. The effort is comprised of community leaders from hospitals, community clinics, academia, community based organizations, faith-based organizations and neighborhood groups who have joined together around their desire to reduce the prevalence of diabetes with a particular emphasis on meeting the needs of low-income and underserved populations.

Prioritized Root Causes or Factors for Metro Health to Address

- Lack of awareness of resources and type 2 diabetes prevention and control measures
- More risk factors for type 2 diabetes among Hispanic or Latino and African-American people
- Insufficient access to affordable, nutritious food

Key Strategies

- Increase and expand YDPP in community settings with a focus on Hispanics or Latinos and African-Americans.
- Expand DSMP in worksite or other settings to reach individuals under 65 years of age.
- Develop an internal referral system to DSMP and YDPP, and integrate nutritional education opportunities for participants.
- Support the San Antonio Diabetes Collaborative's use of the Collective Impact Model to reduce the prevalence of type 2 diabetes in high risk populations.

- 1. Texas Department of State Health Services, Center for Health Statistics. Texas Behavioral Risk Factor Surveillance System (BRFSS). 2011-2014. [Data set]
- 2. Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System (BRFSS): US & Texas. Retrieved from http://www.cdc.gov/brfss/brfssprevalence.
- 3. Centers for Disease Control and Prevention. (2010). Number of Americans with diabetes projected to double or triple by 2050 [Press release]. Retrieved from http://www.cdc.gov/media/pressrel/2010/r101022.html
- 4. Hill J, Nielsen M, Fox MH (2013). Understanding the social factors that contribute to diabetes: A means to informing health care and social policies for the chronically ill. The Permanente Journal. 17(2), 67-72. doi:10.7812/TPP/12-099
- 5. Bryant T, Daiski I, Lines E, et al. Type 2 diabetes: poverty, priorities and policy: the social determinants of the incidence and management of Type 2 diabetes [monograph on the Internet] Toronto, Ontario, Canada: York University School of Health Policy and Management; 2010.
- ${\it 6. Collective Impact Forum\ https://collective impact forum.org/what-collective-impact}\\$

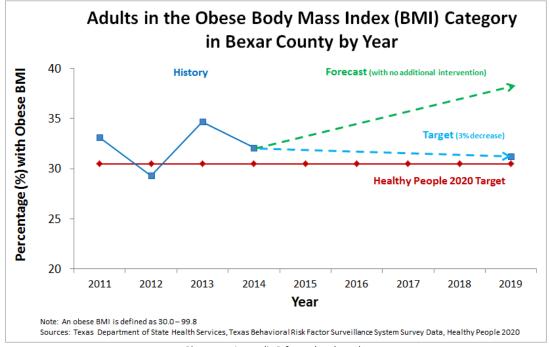
Obesity in Adults





Introduction

The obesity epidemic has affected every part of the United States including Bexar County. In every state more than 20% of adults are obese, and 24 states including Texas have a prevalence of adult obesity of 30% or greater, with Texas at 32% in 2015. In Bexar County the prevalence of obesity in adults in 2014 was 32%. Obesity is associated with increased risk for chronic diseases and other health problems. Creating a community that promotes and supports healthy food and beverage choices and physical activity is critical to preventing obesity, which often leads to a wide range preventable chronic disease.



Please see Appendix D for updated graph.

Story Behind the Baseline

In Bexar County, in 2014 just under one million adults, (71%) were classified as either overweight (39%) or obese (32%) based on their Body Mass Index (BMI). A BMI of 25-29 is considered overweight and a BMI of 30 or more is considered obese. Adult obesity is a national leading health indicator within Healthy People 2020 (HP2020). The national objective is to reduce to 30.5% the percentage of persons aged 20 years and older who are obese. Nationally in 2013-2014, 37.7% of adults aged 20 years and over were obese.

The root causes of obesity in Bexar County are identified as an unhealthy diet and limited physical activity. These root causes are intertwined with household income and where people live. In Bexar County, obesity rates follow the geographic patterns observed with income, as obesity rates are higher among adults who earn less than \$25,000 than those who earn more than \$25,000. Forty-two percent of adults who earn \$25,000 or less are obese, in contrast to only 29% of adults earning \$50,000 or more. Where you live and your household income affect your health outcomes, and impact the access you have to healthy foods and safe places to be physically active. People who are obese are at increased risk for developing many disease and health conditions.

Obesity affects some groups more than others. In Bexar County, Non-Hispanic blacks have the highest rates of obesity (38%) followed by Hispanics (34%), and non-Hispanic whites (28%).² The Hispanic population in Bexar County is young and growing, in comparison to the non-Hispanic white population. This demographic trend alone means that obesity, which is more common among Hispanics or Latinos, will continue to challenge our community over time.

Metro Health has worked to lower obesity rates among Bexar County adults for many years through system, policy and environmental changes. Collaborations with businesses, nonprofits, and city departments have increased healthy choices in the foods and meals served at restaurants, worksites and congregate meal programs through the implementation of nutrition standards. To increase physical activity in neighborhoods Metro Health has supported park improvements, efforts to increase walkability and bikeability including the passing of the Complete Streets policy, Safe Passing Ordinance (bikes), the expansion of bike lanes and trails, and the creation of programs to increase physical activity access like Fitness in the Parks and Siclovia. Obesity is a complex problem that will require ongoing multifaceted initiatives in which policy makers, local organizations, schools, business and community leaders, healthcare professionals, and individuals work together to create an environment that supports a healthy lifestyle.

Prioritized Root Causes or Factors for Metro Health to Address

- Unhealthy diet
- Limited physical activity

Key Strategies

Develop and implement programs and policies that promote healthy eating and physical activity in workplaces and communities.



Develop and implement an awareness campaign to educate the community on healthy food and beverage choices.



Increase access to safe spaces for physical activity and active transportation such as walking and bicycling.



Empower people to advocate for healthy food choices and safe spaces for physical activity within their communities.



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- 2. Texas Department of State Health Services, Center for Health Statistics. Texas Behavioral Risk Factor Surveillance System (BRFSS). 2011-2014. [Data
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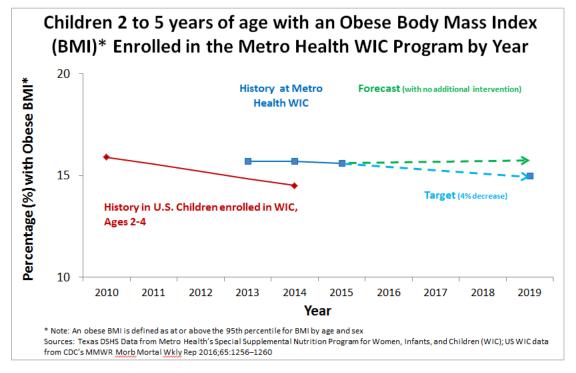
Obesity in Children



Chronic Disease

Introduction

Obesity remains one of the biggest threats to the health of our children and our country, putting millions of young people at increased risk of chronic diseases and contributing to billions of dollars in health care expenditures. In 2014, approximately 17% (12.7 million) children and adolescents between the ages of 2 and 19 in the United States were obese. Children who are overweight or obese are more likely to be obese as adults. Being overweight or obese can put children at higher risk for health problems early on and as they age. Preventing obesity early can impact a child's lifetime trajectory.



Story Behind the Baseline

Physical activity and good nutrition are especially important for young children who need an adequate intake of key nutrients as their brains and bodies are developing. Healthy eating and physical activity in these early years are the foundation for lifelong health. Though the Healthy People 2020 national objective is to reduce to 14.5% the percentage of children and adolescents aged 2 to 19 years who are obese, in 2014, 17% of children and youth in that age group were obese. This objective is also broken down by three age groups, and 2014 national data shows that 8.9% of 2- to 5-year-olds, 17.5% of 6- to 11-year-olds, and 20.5% of 12- to 19-year-olds are obese. Also were obese. The second should be a secon

In San Antonio/Bexar County we have not always had access to consistent obesity data for children and adolescents. We do know that in 2015, 15.6% of low income children aged 2-5 years enrolled in Metro Health's Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) were obese. The closest national data for comparison indicated that in 2014, 14.5% of children aged 2 to 4 years enrolled in WIC programs were obese. In addition, according to the 2013 Youth Risk Behavior Survey (YRBS) conducted in Bexar County, 14.4% of high school students were obese. Obesity disproportionately affects children in low-income households. Metro Health has also been working closely with the Witte Museum H-E-B Body

Adventure since 2014, collecting de-identified and completely anonymous aggregate data metrics in an effort to enhance our understanding of behaviors and attitudes related to physical activity, sedentary behavior, fruit and vegetable consumption, soda consumption as well as information on visitors' heights and weights.

Childhood obesity is a complex health issue that affects Bexar County across socioeconomic and demographic boundaries. The causes are similar to those of adult obesity, including dietary patterns, physical inactivity, disparities in the food and physical activity environment, educational attainment, food marketing and promotion, and intergenerational poverty and trauma. Higher rates of childhood obesity in our central urban core are interconnected to the socioeconomic status and environmental conditions of these neighborhoods.

Traditionally, access to adequate and culturally competent medical care, genetics, and personal behavior were considered the key factors for good health. Increasingly, however, we recognize that physical environment, social, and economic factors hold equal if not more importance. Living in a neighborhood with crime, where walking is unsafe, occupying substandard housing, far from a grocery store, attending low-performing schools, and experiencing psychosocial stress translates into poorer physical and mental health. Improving the social frameworks within these neighborhoods will improve not just obesity but the overall mental and physical health of the residents.

As with adult obesity, Metro Health's approach to childhood obesity involves system, policy and environmental changes. Metro Health has also employed grassroots strategies including community organizers working directly with children and families to specifically address the social and physical conditions of their neighborhoods. These efforts have been successful in improving parks, increasing walkability and bikeability, creating programs and social support to increase physical activity and developing student ambassadors at schools to educate their peers about healthy lifestyles, and increasing healthy food and beverage options.

Prioritized Root Causes or Factors for Metro Health to Address

- Unhealthy diet
- Sedentary lifestyle
- Limited inner city infrastructure that supports a healthy environment

Key Strategies

Expand integration of programs and policies that promote active lifestyles and healthy eating habits for children.



Develop and implement an awareness campaign to educate parents, schools and community on the importance of active lifestyles and healthy food and beverage choices for children.



Improve and increase safe spaces for physical activity including walking and biking for children within their communities.



Empower parents and communities to advocate for healthy food and beverage options and safe spaces for physical activity for children within their communities.



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Priority Area: Communicable Disease

Why is this Important?

Keeping communities safe from infectious diseases is a core mission of public health. From smallpox and cholera in the 1800s to Zika today, public health leads the way in surveillance, prevention and treatment. Despite past successes, we cannot allow ourselves to become complacent. Tuberculosis is experiencing an uptick in the United States for the first time in 23 years; globally, tuberculosis deaths now outnumber HIV deaths. Syphilis rates unfortunately continue to be higher in San Antonio than in any other major Texas city, while nationally, cases of syphilis, gonorrhea and chlamydia have reached an unprecedented peak. Meanwhile vaccines, one of the resounding triumphs of public health, are victims of their own success—preventable diseases like measles and diphtheria are now so rare that increasing numbers of parents feel comfortable opting out of potentially life-saving vaccines for their children.

Results Statement

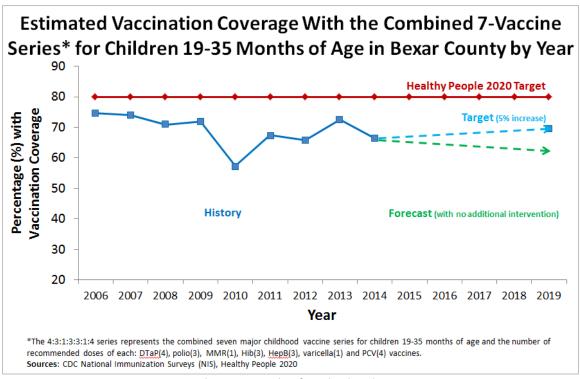
Achieving a reduction in communicable diseases and increasing vaccination coverage levels.

Immunizations for Vaccine Preventable Diseases in Children Communicable Disease



Introduction

Vaccines are a public health success story, and promoting vaccines is a core function of Metro Health. Vaccine-preventable diseases (VPD) have a costly impact on society, leading to large scale epidemics.



Please see Appendix D for updated graph.

Story Behind the Baseline

Vaccine-preventable diseases have a costly impact on society, resulting in doctor's visits, missed time from work, hospitalizations, and premature deaths. The 62% increase in US life expectancy during the twentieth century is largely due to immunization related improvements in child survival associated with reductions in deaths from infectious disease. 2

A core series of childhood vaccines, known as a the 4:3:1:3:3:1:4 series, is a national leading health indicator within Healthy People 2020 (HP2020). The national objective is to increase to 80% the percentage of children aged 19 to 35 months who receive the recommended doses of vaccines against diphtheria, tetanus, pertussis, polio, measles, mumps, rubella, *H. influenzae* type b, hepatitis B, varicella (chickenpox), and pneumococcal disease. The figure above shows the estimated coverage levels in Bexar County of this series; in 2014 the coverage was 66% in Bexar County, compared to 64% in Texas and 72% in the U.S. These estimates are obtained from the National Immunization Survey (NIS), which is conducted annually by the Centers for Disease Control and Prevention (CDC) to assess immunization levels.

Bexar County NIS data shows a decline in the series doses given between 2013 and 2014. This decline could be due to vaccine cost or availability, lack of vaccine reminder systems or lack of knowledge about changing vaccine schedules by healthcare providers. The decline could also be due to parents having the option to file for exemptions based on medical and personal beliefs in Texas.

Though the decreases were minimal, they serve as a reminder that we must continue to make vaccines available, educate the public on the importance of vaccinations, and conduct surveillance to identify groups at risk of vaccine-preventable disease, as well as work with providers to ensure that all patients are immunized according to schedule. The Metro Health Immunization Clinic is the only clinic in the Bexar County area that specializes in providing vaccines without appointments, regardless of ability to pay. We are also the sole source of official immunization records.

By focusing on vaccination education and making vaccines available and affordable, Metro Health works to increase immunization rates in the community, stem vaccine-preventable diseases and save lives.

Prioritized Root Causes or Factors for Metro Health to Address

- Need for community and provider education including addressing patient's misconceptions
- Lack of follow-up, resulting in missed vaccine doses
- Insurance coverage issues

Key Strategies

- Educate parents on the importance of vaccinations.
- Educate providers on the intricacies of vaccination schedules.
- Increase awareness of our services by using media campaigns and ensuring partners are aware of our services.
- Build partnerships and collaborations in the community to enhance vaccination coverage levels.



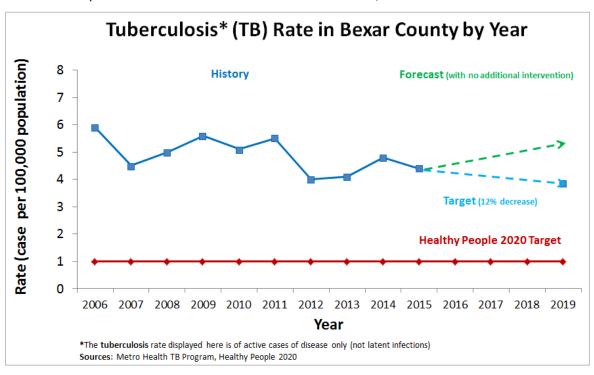
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Tuberculosis

Communicable Disease

Introduction

Eliminating tuberculosis (TB) in the United States and Bexar County requires not only diagnosis and treatment of active TB disease but also an expansion of testing and treatment efforts for Latent TB Infection (LTBI), the condition in which a person is infected with the tuberculosis bacteria, but does not have TB disease.



Story Behind the Baseline

Tuberculosis causes a substantial health burden globally and remains a threat in the US, which reported 9,412 new active cases in 2014 (an incidence rate of 3.0 cases per 100,000 persons). In Texas, the 2015 rate per 100,000 people was 4.9, reflecting a total of 1,334 cases. Half of all TB cases occurred in four states: California, Texas, New York, and Florida. Tuberculosis remains an important preventable disease in the US. Tuberculosis is curable with proper treatment. The Healthy People 2020 national objective for TB aims to reduce the US rate of new cases of TB to 1.0 case per 100,000 people. In September 2016, both the U.S. Preventive Services Task Force recommended encouraging providers, especially private healthcare providers and community health centers, to screen for latent tuberculosis infection (LTBI) in populations at increased risk. This new recommendation expands opportunities for additional public and private health care providers to prevent and control TB.

Bexar County has the third highest number of TB cases in Texas, behind Harris and Dallas counties. In recent years our rates have ranged from 4.0 to 5.4 per 100,000 people. Bexar County's 2015 TB rate per 100,000 people was 4.4, reflecting a total of 83 cases. Bexar County has significant numbers of people who are foreign born, diabetic, and living in congregate settings such as homeless shelters and correctional facilities—all risk factors for TB.

Metro Health is the primary provider serving people with active TB disease in Bexar County. Metro Health also is solely responsible for surveillance and labor-intensive contact investigations necessary to stop the spread of

TB. Turning the curve toward TB elimination will require substantially more attention to the large numbers of people with latent TB infection (LTBI). It is estimated that 12.4 million people in the United States have LTBI.² People with LTBI do not feel sick and are not contagious, unlike people with active TB disease, but without treatment people with LTBI can develop active TB and become contagious.

Prioritized Root Causes or Factors for Metro Health to Address

- No comprehensive screening and treatment program for LTBI.
- Misdiagnosis and/or late diagnosis of active TB disease by local clinicians or hospitals.
- Low completion rates of LTBI treatment

Key Strategies

- Provide resources and educate providers on TB screening, treatment, reporting, and on ways to improve patient adherence to lengthy medication regimens.
- Expand LTBI screening and treatment in high-risk populations.
- Improve awareness of TB among medical providers, partners and community.
- Build partnerships and collaborations in the community to enhance TB efforts with homeless shelters
 and other congregate settings, partner with primary care practices to expand screening and treatment,
 increase targeted screening of diabetic and immunocompromised individuals, and continue to screen
 foreign-born residents in Bexar County.

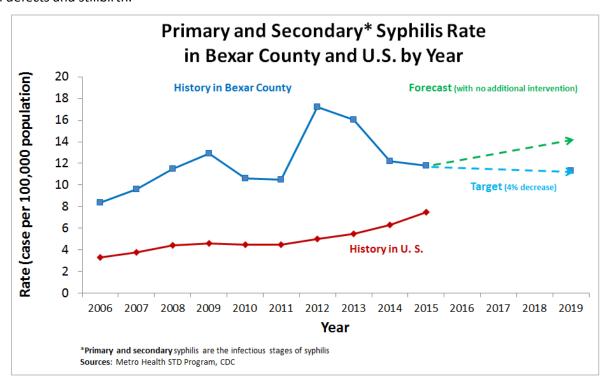
- 1. The Office of Disease Prevention and Health Promotion's Healthy People 2020 (HP2020) Objective IID-29. Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/Immunization-and-Infectious-Diseases.
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Primary and Secondary Syphilis

Communicable Disease

Introduction

Syphilis is a sexually transmitted disease that continues to pose a threat to our community and is increasing rapidly on a national level. Primary syphilis occurs when someone is newly infected, within three months or less. Without treatment, the disease advances to secondary syphilis, sometimes characterized by a rash on the palms and soles. Syphilis is highly contagious in these first two stages. Syphilis is most dangerous when an infected pregnant woman passes it to her fetus. This condition is called congenital syphilis, and can lead to birth defects and stillbirth.



Story Behind the Baseline

The rate of primary and secondary syphilis in Bexar County has had cyclical peaks and valleys over the past 11 years. In 2012, the Bexar County rate (17.2 cases per 100,000 population) was more than 2.5 times higher than state and national rates. Since 2012, the county's rate of primary and secondary syphilis has declined but continues to surpass state and national rates. The county's 2015 primary and secondary syphilis rate was 11.8 per 100,000 people, reflecting a total of 223 cases. Additionally, syphilis rates are rising markedly across the country. If efforts to control syphilis are not enhanced, we could easily see another peak. An increase in cases will lead to a resurgence of congenital syphilis, which is detrimental for the infant and for the family caring for the infant.

Bexar County has higher syphilis rates for a multitude of reasons. One is the continued prevalence of risky sexual behaviors, such as unprotected anonymous sex, multiple sex partners, and the use of internet and mobile applications to find anonymous sex partners. A large number of women do not receive early or adequate prenatal care and therefore do not receive syphilis testing. Their babies are at risk for congenital syphilis. Effective prevention and detection of congenital syphilis depends on the identification of syphilis in pregnant women. It is likely that a pregnant woman with untreated syphilis will pass syphilis to her unborn

child with devastating consequences. Additional contributing factors include: individuals not seeking testing or treatment due to lack of health insurance or a medical home; lack of awareness of community resources available for testing and treatment; providers not giving appropriate treatment; and individuals not being aware of the signs and symptoms of syphilis.

In an effort to address the high rate of congenital syphilis cases in Bexar County, Metro Health spearheaded a successful effort to pass a Texas law mandating repeat syphilis testing in the third trimester of pregnancy. In addition, Metro Health invested in a Mobile Unit which allows us to bring testing and treatment to the areas that most need it. The unit will be strategically located in areas experiencing a high incidence of cases to ensure that access is not a barrier. Metro Health also remains involved as a community partners on the HIV-Syphilis Testing Task Force.

Prioritized Root Causes or Factors for Metro Health to Address

- Lack of awareness of the need for syphilis testing and treatment
- Lack of knowledge among health care providers about testing and treatment
- Sustained engagement by individuals in high-risk behaviors (anonymous sex, lack of condom use, multiple partners, using Internet and mobile applications to find partners, etc.)

Key Strategies



- Enhance partnerships internally and externally to ensure that health care providers know about syphilis testing, treatment, reporting and the availability of services at Metro Health.
- Increase awareness of Metro Health services among the public using media campaigns and by ensuring that partners are aware of services; including investigating new methods for communicating with at-risk populations to encourage testing.
- Expand syphilis treatment in nontraditional settings, such as in the mobile unit or homes.



Create a unified mission with partners at the San Antonio Area HIV-Syphilis Testing Task Force.



Priority Area: Environmental Health and Safety

Why is this Important?

A healthy and safe environment is essential to the population health of Bexar County and San Antonio. In fact, it was public demand for environmental health that helped create the San Antonio Health Department in the nineteenth century. Concerns about cholera due to contaminated sewage water and about sanitation practices by the chili vendors around the city square were two of the first issues that the department tackled.

In the twenty-first century, access to safe food, clean air and water, and a safe environment free of mosquito borne disease are still just as critical to a healthy and thriving community—environmental health is the foundation without which a community cannot thrive and prosper.

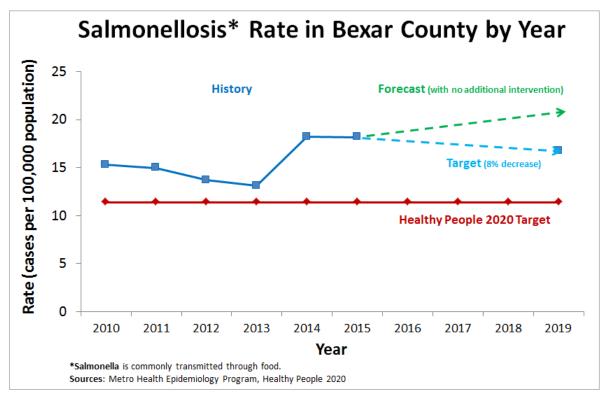
Results Statement

A healthy and safe environment is maintained for the entire Bexar County population.

Salmonellosis (commonly transmitted through food) Environmental Health

Introduction

Every year it is estimated that 1 in 6 Americans get sick from a foodborne illness, 128,000 are hospitalized and 3,000 die. According to the Centers for Disease Control and Prevention (CDC), food safety is one of its top seven priorities, a "winnable battle" in public health. Foodborne illnesses are preventable and an underreported problem that contributes significantly to the cost of health care. Salmonella was the most frequent cause of reported foodborne illness to the CDC's Foodborne Diseases Active Surveillance Network in the US in 2015. San Antonio is the seventh largest city in the United States, and efforts to prevent foodborne illness are extremely important to residents as well as to the 31 million tourists who visit San Antonio each year and enjoy our restaurants.



Story Behind the Baseline

Prompt and effective outbreak investigations and reporting of outbreak data are crucial to remove contaminated food from human consumption, prevent further illnesses and understand how to prevent them from happening again. There are seven pathogens responsible for most foodborne illnesses in the US. Several of these diseases have declined over the past 15 years; however *Salmonella* infections have not. Foodborne illnesses are of special concern for children under four years of age, adults older than 50 years of age and those with reduced immunity. *Salmonella* is most often spread to people through contaminated food, including meat, poultry, eggs, and produce. Healthy People 2020 (HP2020) set a national objective to reduce infections caused by Salmonella species transmitted commonly through food to 11.4 cases per 100,000 people. The salmonellosis rate in Bexar County, obtained from local surveillance data, increased by 39% from 2013 to 2014 to 18.2 cases per 100,000 people; it remained high in 2015. Without additional intervention it is expected to continue to increase.

Prioritized Root Causes or Factors for Metro Health to Address

- Lack of food safety/hand washing education for general public, restaurant staff and management.
- Lack of monitoring of best practices within food establishments.
- No local laboratory capacity for food testing to ensure timely results on all specimens.

Key Strategies

- Increase distribution of educational materials in several languages to restaurant staff, management and the general public.
- Develop and distribute a toolkit to help managers monitor food establishments (checklist, training videos and sample standard operating procedures).
- Increase availability of food safety consultations to restaurants.
- Implement local food testing capacity within Metro Health.

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- 5. Smith, Shanna. (2014). Travel and tourism impact study reports tremendous growth for San Antonio. Retrieved from http://media.visitsanantonio.com/News/English/Travel-Tourism-Impact-Study-Reports-Tremendous-Gro
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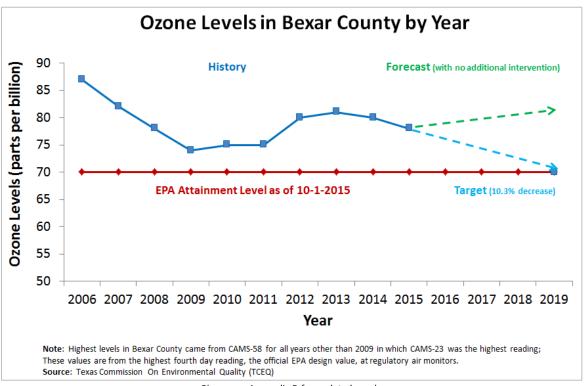
Ozone Levels





Introduction

Air quality is a high priority for the City of San Antonio and Bexar County. San Antonio ozone levels have exceeded the newest national clean air standard established in 2015, although we are currently considered in attainment by the Environmental Protection Agency (EPA). Ozone that occurs at ground level can affect people's respiratory health. It is estimated that one in three people in the US are vulnerable to ozone-related health effects. 1



Please see Appendix D for updated graph.

Story Behind the Baseline

Ozone in the air we breathe can be harmful, especially on hot sunny days when ozone can reach unhealthy levels. Even relatively low levels of ozone can cause health effects. These effects have been found in many people, but can be more serious in people with lung diseases such as asthma. People most at risk include those with asthma, children, older adults, and those who are active outdoors, especially outdoor workers.²

San Antonio is the only large city in the nation that the Environmental Protection Agency (EPA) has not yet designated as out of compliance with the newest national clean air standard for ozone. The EPA lowered the ozone attainment level on October 1, 2015 to 70 parts per billion (ppb). San Antonio's ozone levels are above this national standard; in 2015 the ozone level was 78 ppb. It is expected that the EPA will declare San Antonio in nonattainment as early as October 2017. When this nonattainment designation is declared, new restrictions and requirements will be placed on local governments, industries and residents.

San Antonio and Bexar County have been successful in lowering the ozone levels in recent years through a regional approach of public education and voluntary measures taken by government and industry. However, as local ozone levels have decreased, concurrently the EPA's ozone attainment level decreased. This has

positioned San Antonio and Bexar County on the threshold of nonattainment. Industries, government and residents of Bexar County and San Antonio have become accustomed to being on the cusp of nonattainment; historically there has been a lack of engagement in developing a strong corrective action plan or policies to lower ozone levels. Ongoing education for industrial business owners and residents to help them fully understand the economic and health impacts of ozone nonattainment, and the science behind high ozone levels in Bexar County will be key to addressing this issue.

Taking steps in the right direction, San Antonio and Bexar County recently passed anti-idling regulations for large vehicles, 14,000 pounds and above. San Antonio passed an ordinance in November 2015 updating the language of Chapter 26 City of San Antonio Municipal Code "Pollution Control," Article II, "Air Pollution," by updating state law references and requiring that businesses with sources of air pollution register with Metro Health. Registration will provide information that Metro Health will use in determining strategies to lower ozone levels. Through this registry, an industry coalition to work on best practices will be formed. Roundtables and public meetings will provide input on stronger policies to reduce local ozone levels and create a community action plan to improve air quality. Research will be conducted to increase understanding of local health and economic effects and environmental causes of high ozone levels.

Prioritized Root Causes or Factors for Metro Health to Address

- Lack of industry commitment to lower emissions.
- Lack of understanding of impact on local governments, industries and residents of nonattainment.
- Lack of community plan to improve air quality and reduce ozone levels.

Key Strategies

- Form an industry coalition to work on best practices to improve air quality and reduce ozone levels.
- Develop and implement stronger policies to reduce local ozone levels.
- Create a community plan to improve air quality.
- Increase understanding of local health and economic effects of ground level ozone.

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Response Capacity to Mosquito-Borne Diseases Environmental Health

Introduction

Mosquito-borne diseases are those spread by the bite of an infected mosquito. Diseases that are spread to people by mosquitos include Zika virus, Chikungunya virus, West Nile virus, encephalitis viruses, and dengue virus. Increasing global travel, urbanization, and warm temperatures are contributing to mosquito borne disease outbreaks in new regions and countries.¹



Aedes aegypti mosquito, from CDC²

Background

San Antonio's rapid population growth, warm climate, proximity to the Mexican border, and developing hub for international travel means that we are at increased risk of mosquito-borne diseases that are difficult to prevent and control. Because some of these diseases can be hard to diagnose, new diagnostic tests are being developed to quickly identify these diseases. They can also have devastating consequences, such as: Zika can cause severe birth defects, Chikungunya causes debilitating joint pain, and dengue can be deadly. They are spread by *Aedes aegypti* and *Aedes albopictus* mosquitoes. Some of these diseases have been present in the United States for many years while others have recently emerged.

In Bexar County we periodically have cases of West Nile Virus. Recently we have had 20 travel related cases of Zika. Metro Health's Environmental Health Team has worked closely with other City departments and community partners in capacity development in an effort to reduce mosquito breeding on city owned and abandoned properties and prevent local spread of mosquito-borne diseases. We have also worked to strengthen collaboration with our Epidemiology Section in response to mosquito-borne illness reports.

Additionally, the Metro Health Laboratory is seeking funds, equipment and personnel to increase testing for viruses in people and reporting capabilities which are currently limited. Lastly, a task force has been assembled that consists of city, county, state and federal partners. The City of San Antonio and Metro Health are working with the private sector pest control companies to further expand our overall mosquito response capabilities if a large scale local transmission event is encountered. An educational campaign has been developed to help educate the general public on controlling mosquito breeding.

Overall, Metro Health is actively seeking long range funding opportunities to increase laboratory testing capabilities for viruses in people; continued improved communication between partners; additional educational materials, increased community and media engagements and enhanced mosquito surveillance capabilities. Metro Health's ultimate goal is to prevent local transmission of mosquito borne disease and increase our capabilities to control the overall mosquito population and response capabilities.

Prioritized Root Causes or Factors for Metro Health to Address

- Lack of public participation in preventative activities, especially as related to reducing mosquito breeding sources.
- Lack of sufficient funding for licensed vector control staff, equipment and supplies to conduct abatement and education.
- Limited coordinated efforts on mosquito control with partner agencies throughout Bexar County.

Key Strategies

- Increase dissemination of educational campaign materials to the public on preventative measures to reduce the spread of mosquito borne diseases, including in multiple languages.
- Secure funding to increase the number of licensed staff, equipment and supplies for the Metro Health Vector Control Program.
- Implement strategies to reduce stagnant water throughout San Antonio and Bexar County (mosquito source reduction).
- Develop a multi-agency response plan in coordination with the recently developed city, county, state
 and federal task-force to combat mosquito-borne diseases across San Antonio and Bexar County and
 ensure capacity to respond to a large scale transmission event.

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- Centers for Disease Control and Prevention. Professor Frank Hadley Collins, Director, Center for Global Health and Infectious Diseases, University of Notre Dame. 2006

Priority Area: Maternal, Child, and Teen Health

Why is this Important?

How a society takes care of its mothers, children and adolescents has profound ripple effects on families, communities and the healthcare system in ways that reach into subsequent generations. When women have access to prenatal care, they are more likely to have healthy pregnancies and healthy babies. When children grow up in safe and violence-free environments, they are more likely to thrive and be productive later in life. When teenagers delay sex and pregnancy, they can stay in school and achieve more of their dreams. Unfortunately, when it comes to maternal, child, and teen/adolescent health in Bexar County, progress has stalled in key areas in recent years. These key areas include deaths of African-American infants, first trimester pregnancy care, and repeat teen births.

Data shows that while Bexar County infant mortality rose only slightly overall between 2011 and 2014, from 4.7 to 5.0 deaths per 1,000 live births, the rate among non-Hispanic African-American infants jumped significantly, from 5.8 to 10.6 deaths per 1,000 live births. High numbers of women received no first trimester pregnancy care. Unfortunately, more than 1 in 5 pregnant teen mothers in Bexar County received no prenatal care at all in 2014, compared to 1 in 7 pregnant women ages 20 and up. Teen pregnancy has been emphasized as one of the leading factors contributing to high school dropout rates, single parenting, and economic dependence on governmental assistance. Teen childbearing in San Antonio cost taxpayers at least \$54.2 million in 2014. While San Antonio has seen significant improvement in the teen birth rate since 2010, the percentage of repeat teen births has not shown any improvement. In 2014, 22% of all teen births in San Antonio were repeat births, the same as in 2010. The lack of progress around these important issues has informed Metro Health's collaborative efforts to make change in these areas and continue improving the lives of women, children and teens in Bexar County.

Results Statement

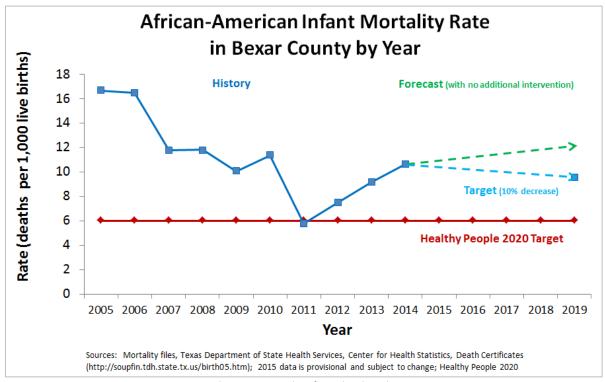
Women of childbearing age, teens, and infants in Bexar County are healthy

African American Infant Deaths

Maternal, Child, and Teen Health

Introduction

Infant mortality (death) is a measure of the health and wellbeing of children and the overall health of a community. Infant deaths are a national leading health indicator within Healthy People 2020 (HP2020). The national objective is to reduce the rate to 6.0 infant deaths per 1,000 live births. Though this was achieved nationally in 2012 and 2013; large racial and ethnic disparities exist, as the U.S. African-American infant death rate remains almost twice as high at 11.1 infant deaths per 1,000 live births in 2013.



Please see Appendix D for updated graph.

Story Behind the Baseline

The death of a baby before his or her first birthday is called infant mortality. The infant mortality rate is an estimate of the number of infant deaths for every 1,000 live births. According to the Centers for Disease Control and Prevention (CDC), over 23,000 infants died in the United States in 2014.² Birth defects, preterm births, maternal complications of pregnancy, Sudden Infant Death Syndrome (SIDS), and injuries accounted for 57% of those deaths.² Sadly, some of these deaths are not preventable. But through increased knowledge of safe sleep practices, provider education and partnerships and identifying and preventing violence in the home, we can put an end to many of these tragic deaths.

The infant mortality rate is like a snapshot of a community's health. As a measure of population health, it reflects the association between the causes of infant mortality and other factors that are likely to influence the health status of populations, such as economic development, social wellbeing, rates of illness, and the physical environment. In 2013 the infant mortality rate for Bexar County was 6.04 per 1,000 live births.³ Although this rate compares favorably to the national rate of 6.05 for the same year, and is close the Healthy People 2020

goal, the Bexar County infant mortality rate has increased significantly since 2011, when the infant mortality rate had dropped to 4.7 deaths per 1000 live births.

More concerning, the gaps between non-Hispanic whites and other race/ethnicity groups are widening in Bexar County. In 2014, infant mortality rates were almost 2 times higher among Hispanics and almost 4 times higher among non-Hispanic African Americans. From 2005 to 2011, the infant mortality rate among non-Hispanic African Americans declined steadily from 16.7 deaths to 5.8 deaths per 1,000 births, which was nearly in line with other racial groups. All rates increased from 2011 to 2012. But from 2012 to 2014, non-Hispanic African American infant mortality rates steadily increased from 7.5 to 10.6 deaths per 1,000 births, while all other races and ethnicities experienced a decline. This alarming disparity is projected to continue without targeted and strategic intervention. Higher rates of low birth weight infants and prematurity are associated factors contributing to the greater risk of infant death in minority populations. Racial and ethnic minority families need special attention, focus and priority in perinatal health services.

A healthy pregnancy begins before conception and continues with appropriate prenatal care and addressing problems if they arise. Metro Health programs like San Antonio Healthy Start offer individualized support for childbearing-age, pregnant and parenting women to help them experience healthy lifestyles and manage any conditions that may affect their perinatal health and the health and wellbeing of their child. Metro Health proposes the three strategies below to augment our current efforts to reduce African-American infant mortality.

Prioritized Root Causes or Factors for Metro Health to Address

- Lack of safe sleep environments
- Lack of provider and public education on preventing preterm births

Key Strategies



- Increase safe sleep environments for infants through home visits and community education with focused efforts on African-American families.
- Promote 17-hydroxyprogesterone (medication given at 16 weeks of pregnancy) to prevent preterm births among women who already had a preterm birth, especially in minority women.
- Through the Fetal-Infant Mortality Review process, review infant death cases in Bexar County especially focused on minority women.



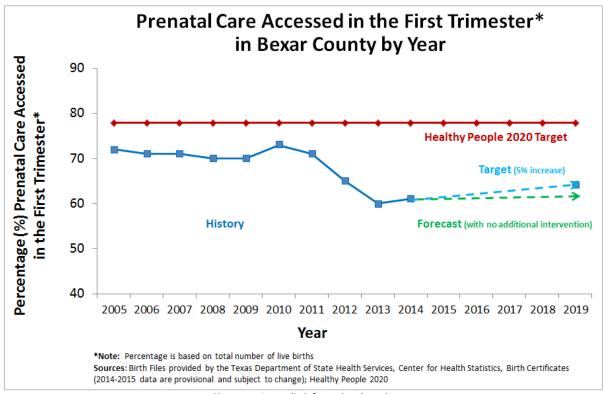
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First Trimester Pregnancy Care

Maternal, Child, and Teen Health

Introduction

Prenatal health starts with the mother's physical and emotional well-being even before pregnancy, and continues with first trimester and continuing prenatal care. Women with inadequate prenatal care are at least three times as likely to deliver preterm babies, compared with women who have complete prenatal care. The average cost of medical care for a premature or low birth-weight baby for the first year of life is about \$54,000. In contrast, a healthy, full-term newborn costs \$4,400 for medical care in the first year of life.



Please see Appendix D for updated graph.

Story Behind the Baseline

The Healthy People 2020 (HP2020) national objective for first trimester prenatal care aims to increase the proportion of pregnant women who receive prenatal care beginning in the first trimester to 77.9%. About 22% of adolescents under 20 years of age in Bexar County received no prenatal care at all in 2014. In stark comparison, across Texas that same year, only 5% of teen mothers under 20 years of age reported no prenatal care. Hispanic or Latino women and Medicaid patients make up a disproportionate number of our county's women with late or absent prenatal care. Women cite a variety of barriers to care, including lack of information about how to obtain prenatal care and health insurance; difficulty making appointments; lack of time, transportation and childcare; not realizing they are pregnant; uncertainty about whether they wish to continue the pregnancy; and cultural barriers. In addition, women who are impacted by mental health issues, partner violence and/or substance abuse may experience more difficulty accessing timely and consistent care. Bexar County's 2012-2014 rates of women receiving early (first trimester) care conform to state rates, at 62% for the state and 61% for our county.

Metro Health has work to do to achieve the national Healthy People 2020 goal. Metro Health proposes the following four strategies to help achieve this national goal.

Prioritized Root Causes or Factors for Metro Health to Address

- Access to early prenatal care
- Lack of transportation to and from appointments
- Lack of provider and public education about the importance of prenatal care and how to obtain prenatal care and/or healthcare insurance

Key Strategies

- Increase healthcare coverage among reproductive age women by expanding partnerships with EnrollSA and city agencies.
- Increase prenatal care visits among women who have applied for Medicaid or CHIP through public and provider education.
- Educate the community on the importance of early prenatal care and where to obtain it, for example, by expanding the "Go Before You Show" campaign or supporting preconception peer educators.



Start a pilot project to reduce transportation barriers to prenatal care, such as a mobile care unit or a volunteer transport program.

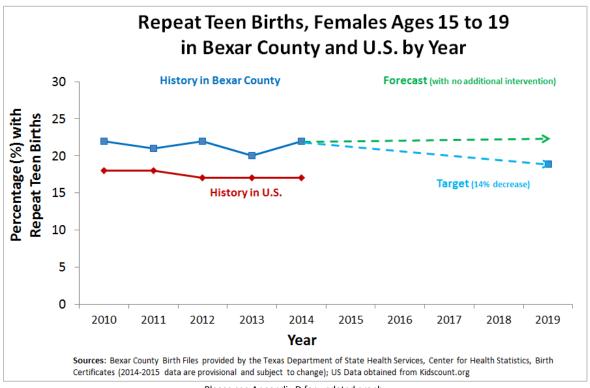
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Repeat Teen Births

Maternal, Child, and Teen Health

Introduction

According to the Centers for Disease Control and Prevention (CDC), teen pregnancy prevention is one of its top seven priorities, a "winnable battle" in public health, and of paramount importance to health and quality of life for our youth and families.¹



Please see Appendix D for updated graph.

Story Behind the Baseline

A host of risk factors play a role in teen pregnancy. These include lack of reproductive health education among teens, limited or poor parent-child communication, a cycle of teen pregnancy through generations, and teen females dating older males. Research shows that teen pregnancy is closely linked to critical social issues such as poverty and income; overall child well-being; education; responsible fatherhood; out-of-wedlock births; child welfare; and other risky behaviors. Repeat teen childbearing further constrains the mother's education and employment possibilities. Nearly 1 in 5 teen births in the U.S. are repeat teen births. Rates of preterm and low birth weight are higher in teens with a repeat birth, compared with first births.

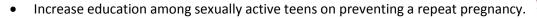
In 2010, the Bexar County community identified teen pregnancy as a key health issue to address through the SA2020 visioning process. In 2014, the City of San Antonio conducted a random community survey including all ten City Council Districts. At least 100 surveys were completed in each of the City's ten council districts. When asked about which three issues were most important for the City to address, teen pregnancy was selected as the first choice by respondents. Through local collaborative efforts, the Bexar County teen birth rate among females ages 15 to 19 has declined by 46% from 2000 to 2014. Even with this decline, the county's teen birth rate was still 55% higher than the U.S. teen birth rate in 2014. With regard to repeat teen births, 22% of all teen births in Bexar County were repeat births in 2014, which was the same as in 2010. The CDC recommends

the use of evidence-based programs and encourages health care providers, parents, guardians, and caregivers talk to both male and female teens about avoiding pregnancy by not having sex and discussing with sexually active teens the most effective types of birth control to prevent a teen pregnancy, especially a repeat teen pregnancy.

Prioritized Root Causes or Factors for Metro Health to Address

- Lack of reproductive health education
- Teens do not know where to access contraceptives
- Teen females dating older males
- Social norms; parent-child communication

Key Strategies





Increase stakeholder coordination of case-management services for teen mothers to address repeat teen pregnancies and connect teen fathers to support services.



Increase linkages from youth serving organizations to community-based clinical and other support services.

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Priority Area: Oral Health

Why is this Important?

Oral diseases cause pain and disability for millions of Americans.¹ Conditions ranging from tooth decay to oral cancer and can have a profound impact on and individual's overall health and quality of life.² Research has linked poor oral health to several chronic diseases including heart disease, stroke and diabetes.^{3,4} Community water fluoridation combined with effective prevention and treatment efforts have resulted in significant improvement in oral health in the United States over the last fifty years.⁵ Despite this progress, lack of access to dental care remains a barrier for people of all ages, particularly for people living in poverty. Oral health disparities also exist for many racial and ethnic groups, by age, gender, education level and geographic location.⁴

According to the 2013 Bexar County Community Health Assessment Report, only 60% of people over the age of 65 had visited the dentist in the last 12 months. Residents frequently cited lack of insurance and underinsurance as a barrier to accessing dental care. Regular dental visits play an important role in early diagnosis and prevention of dental disease. As such, the Office of Disease Prevention and Health Promotion opted to begin tracking annual dental visits for children, adolescents and adults as a Leading Health Indicator in the Healthy People 2020 (HP2020) national objectives.⁶

Results Statement

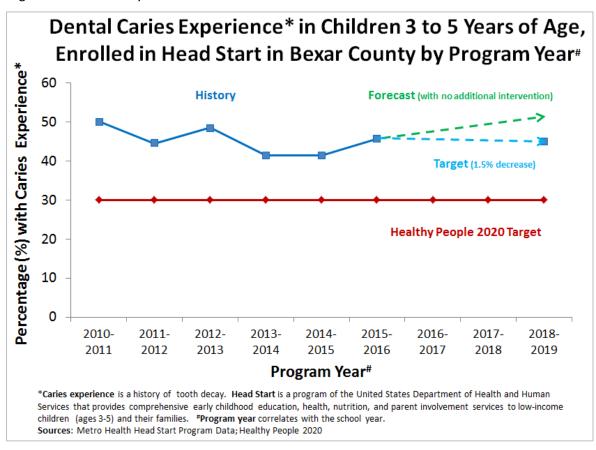
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History of Dental Cavities in Children Oral Health

Introduction

Dental caries, commonly known as tooth decay or cavities, is the most common chronic disease of childhood. Technically, caries is the disease that causes tooth decay and can lead to cavities in teeth. Caries is a largely preventable condition that can lead to persistent pain, infection, compromised nutritional intake and reduced self-esteem. Caries experience, or history of tooth decay, is determined by the presence of treated decay (missing or filled teeth) and/or untreated decay. A history of decay is the most significant risk factor for future dental caries. Prevention of tooth decay in early childhood is important to establish good oral health for school-aged children and beyond.



Story Behind the Baseline

Tooth decay is an infectious disease, caused primarily by the bacteria, Streptococcus mutans, which is often passed from mother to child during early childhood.¹ Preschool-age children are nearly three times more likely to have experienced tooth decay than to have asthma.² When tooth decay occurs in children under the age of six, it is called early childhood caries. Children living in poverty are particularly vulnerable to early childhood caries, and greatest disease burden is found in children of color.^{3,4}

Healthy People 2020 national objective (OH-1.1) established the goal of reducing the proportion of children aged 3 to 5 years with dental caries experience in their primary teeth from 33% to 30% by 2020. In Bexar County, among children ages 3-5 enrolled in the local Head Start programs, caries experience has averaged 45% over the last six years. Bexar County has large populations that are economically disadvantaged, face

cultural barriers and are less educated, which may contribute to the higher disease rate.⁶ Also, the oral health of the mother has a significant impact on a child's oral health.¹ Limited oral health resources for adult patients, is another contributing factor.

Metro Health has implemented a fluoride varnish program for children ages 3-5 who are at high risk for early childhood caries. Through this program, children in this age group enrolled in Head Start programs receive fluoride varnish applications on-site during the school year. Increasing the intensity of exposure to fluoride varnish in this age group is an evidence-based approach that has been shown to be effective in other programs. Metro Health monitors the oral health status of participating children enrolled in Head Start, and provides case management support to ensure all children are connected to comprehensive dental care. Additional Metro Health program data from the 2015-2016 school year reveals an improvement in oral health statistics for 33% of participating children between the first and second visit.

Unfortunately, these interventions do not come soon enough for many of the children enrolled in the program. In order to progress toward improved oral health for children ages 3-5 in Bexar County, additional resources must be identified to expand oral health education. This education must address the importance of drinking fluoridated water, visiting the dentist regularly, eating a balanced diet, limiting sugar, maintaining daily oral hygiene, and reducing or limiting early exposure to the bacteria that cause decay.

Prioritized Root Causes or Factors for Metro Health to Address

- Not prioritizing dental health services for children
- Lack of education on the prevention of caries or disease in children

Key Strategies

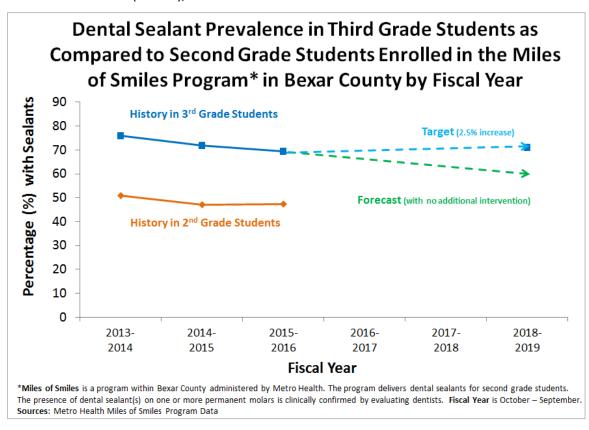
- Improve access to early dental preventive care
- Establish an Oral Health Collaborative
- Develop oral health train-the-trainer programs for implementation by family support workers and local case managers

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Dental Sealants in Children (protection from cavities) Oral Health

Introduction

Dental sealants are thin plastic coatings that are applied to the grooves of teeth to protect the chewing surfaces from decay by keeping out pieces of food, debris and the bacteria that cause cavities. Application of sealants is a quick and painless process, and can be safely and effectively performed in a traditional dental office or a community-based location (such as a school) using portable dental equipment. The Centers for Disease Control and Prevention (CDC) determined that dental sealants are very effective and can prevent 80% of cavities in the back teeth (molars), where 9 out of 10 cavities occur.



Story Behind the Baseline

Similar to their younger counterparts, oral health disparities also exist for school-aged children. Approximately 80% of untreated tooth decay is found in about 25% of children, with Hispanic, non-Hispanic African-American, and low-income children disproportionately affected.³ Based on a systematic review of the scientific evidence, U.S. Preventive Services Task Force recommends school-based sealant programs based on strong evidence of effectiveness in preventing tooth decay among children.⁴

Utilization of dental sealants is on the rise, however, low income children are 20% less likely to have sealants, and twice as likely to have untreated cavities.² Despite overall gains in utilization of dental sealants, significant disparities remain for low-income children. The CDC estimates that about 60% of children ages 6-11 do not get sealants. Also, children from low-income families are 20% less likely to get dental sealants and two times more likely to have untreated cavities than their more affluent counterparts.²

Sealants are most effective when they are applied around the time the tooth erupts. Most children will have their first permanent molars at age 6, and their second permanent molars at age 12. Metro Health's school-based sealant program, called Miles of Smiles San Antonio, is working toward improved oral health outcomes for children at high risk for decay by providing preventive care on the elementary school campuses with the highest concentration of children living in poverty. Targeting higher risk schools to reach higher risk children is an evidenced based approach for increasing sealant prevalence. By providing preventive dental care at the right time (soon after tooth eruption) for children at high risk for decay, the Miles of Smiles program aims to remove barriers to care and reduce oral health disparities for school-aged children.

The Miles of Smiles program is designed to provide dental sealants for second grade students. The graph above captures the prevalence of dental sealants in second grade students as well as third grade students. While an increase in prevalence is to be expected with an increase in age, the relative increase on campuses served by the program is remarkable; an average 49% increase over these three fiscal years.

The Miles of Smiles program allows Metro Health to reach approximately 15,000 children attending eligible campuses in seven school districts in Bexar County. Participating students receive age-appropriate preventive care and case management services. Available funding supports services for only a fraction of children in need. Through implementation of the strategies outlined below, Metro Health aims to sustain existing services and expand to serve additional populations in need in our community.

Prioritized Root Causes or Factors for Metro Health to Address

- Lack of access to dental services for children
- Lack of education about the use of sealants to prevent dental caries

Key Strategies

- Improve access to oral health care by educating parents about how to access or remain enrolled in Medicaid, CHIP or private insurance for oral health services.
- Establish an Oral Health Collaborative.
- Train partners and parents about oral health and prevention of dental disease, the importance of sealants, and maintaining a dental home.

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Priority Area: Infrastructure

Why is this Important?

In 2012, Metro Health leadership initiated a re-alignment of internal programs and services in an effort to centralize business support functions; streamline processes and improve overall efficiency within the department's infrastructure. Since then, the Operations Division has developed a centralized support team that provides day to day administrative, fiscal, policy and planning guidance to the entire department. Other critical functions within this division include contracts and grants management, HIPAA compliance, information technology, human resources, workforce development, facilities maintenance and performance and quality improvement. The strategic initiatives outlined below will allow Metro Health to better align internal service delivery with national public health accreditation standards. These standards call for greater emphasis on ensuring the workforce is well prepared to address today's public health challenges by providing opportunities for professional development and training. In addition, they highlight the need to increase knowledge and competency of the workforce in processes used to continuously improve performance. Lastly, Metro Health will continue to invest in its Health Information Technology efforts to ensure patients have access to their health data so they can make informed decisions about their care.

Results Statement

Metro Health has an efficient and effective organizational infrastructure that supports public health functions.

Workforce Development for Current and Future Staff Infrastructure

Introduction

Metro Health is committed to ensuring that the needs of both existing and future workforce members are met. This calls for a focus on recruiting and retaining staff that are well prepared to carry out the ten essential public health services by providing ongoing training and opportunities for growth and development.

Background

In recent years, Metro Health has made efforts to standardize the introduction of new staff to the department through the development of a new employee orientation that encompasses mandated training topics and an overview of how Metro Health carries out essential public health functions. Still, there is much work to be done. Through this plan, Metro Health will initiate the process to adopt the Core Competencies for Public Health Professionals (Core Competencies) developed by the Council on Linkages Between Academia and Public Health Practices (Council on Linkages). These competencies are a set of skills for broad public health practice, reflecting proficiencies that public health agency staff should possess as they work to protect and promote the health of communities. Based on these competencies, we will assess our gaps and develop a plan to address the needs of the department.

Similarly, as the only local public health agency serving Bexar County, we have an obligation to assist in preparing the future public health workforce. By collaborating with local and national educational institutions, we will create partnerships to assist in shaping future public health professionals by providing learning opportunities, training and resources to tackle both current and future complex public health issues.

Key Strategies

1) Ensure a well-trained and culturally competent workforce

- Conduct a workforce needs assessment to identify individual and program level gaps in training, and further develop staff as outlined in the Council on Linkages' Core Competencies.
- Develop and implement a Workforce Development Plan to address gaps identified in the workforce needs assessment.

2) Promote public health as a career choice by developing a quality internship program

- Conduct an environmental scan of local educational institutions for establishing or improving partnerships.
- Conduct an internal needs assessment to determine program priorities and opportunities for mutually beneficial internships.
- Develop a pre- and post-internship survey to assess quality and areas for improvement.
- Create a recruitment presentation to be used at community or university job fairs.

Agency Wide Performance Management and Quality Improvement



Infrastructure

Introduction

Through the guidance of the department's Performance Improvement Team, Metro Health will continue its journey towards creating a culture of quality through ongoing opportunities for specialized training and encouraging staff engagement in identifying areas for improvement and development of solutions.

Background

The Public Health Foundation describes performance management for local public health as "actively using data to improve performance, including the strategic use of performance standards, measures, progress reports, and ongoing quality improvement efforts to ensure an agency achieves desired results." As Metro Health strives to achieve and maintain public health accreditation status, the department is committed to enhancing its performance management system to increase transparency, evaluate program performance and promote continuous quality improvement to enhance service delivery and improve health outcomes for the populations we serve. The Public Health Foundation lists a variety of ways that performance management can positively influence a public health agency, such as:

- Better return on dollars invested in public health, and better data for illustrating that value
- Better alignment of strategic priorities with relevant measures of success
- Greater accountability for funding and increased public trust
- Reduced duplication of efforts
- Better understanding of public health accomplishments and priorities among employees, partners, and the public
- Increased cooperation and teamwork
- · Emphasis on quality, rather than quantity
- Improved problem solving¹

Through this plan, Metro Health will work to better align performance management and quality improvement activities to address community health improvement efforts and department goals and objectives to ensure we are achieving desired results and adapting when improvement is needed.

Key Strategies

- 1) Support data-driven decision making that leads to improved service delivery and public health outcomes for all populations.
 - Develop a performance management (PM) system for collecting, analyzing and regularly reporting data to monitor progress on departmental goals and objectives.
 - Train Metro Health staff on developing, monitoring and analyzing performance measures.

2) Create a culture of quality that promotes continuous improvement.

- Develop and implement a Quality Improvement (QI) Plan including a PM-QI Committee to oversee department performance measures and strategic plan progress.
- Train Metro Health staff on quality improvement methods and techniques.
- Conduct quality improvement projects and report outcomes including lessons learned.

Reference

1. Adapted from: From Silos to Systems: Using Performance Management to Improve the Public's Health (page 17)

Health Information Technology and Security Infrastructure

Introduction

Through the use of technology, Metro Health strives to improve the confidentiality, integrity, availability, and security of all patient information. Metro Health will continue to make strides in improving service delivery and population health through the meaningful use of Health Information Technology (HIT).

Background

The passage of the Affordable Care Act in 2009 brought sweeping changes to the healthcare landscape. Part of these changes brought greater focus to the importance of preventive health services and a call for the nation's healthcare system to improve outcomes through increased access to care, improved service delivery and reduced costs. A critical part of this reform, however, relies on the ability of both providers and patients to obtain timely and accurate health care information to improve clinical decision making. An overarching goal of healthcare reform is to develop and implement a nationwide HIT infrastructure in which the electronic use and exchange of health information results in more effective, efficient health care delivery.¹

Metro Health has taken critical steps towards developing an integrated public health IT system that ultimately will improve care coordination between Metro Health clinical service areas, increase security, and improve public health surveillance capacity to identify and act upon health trends in the community. In 2014, Metro Health began the rollout of its electronic health record system, Insight, a product of Netsmart Technologies which is currently used at Metro Health's STD/HIV, TB and Immunizations clinics. Over the next three years, Metro Health will build on this foundation by laying out a strategic roadmap for achieving the next two phases of Meaningful Use standards with an end goal of enhancing patient engagement, by allowing patients electronic access to their health information while ensuring compliance with State and Federal HIPAA standards.

Key Strategies

- Publish a Technology Master Plan that communicates the value and benefits of health information technology, including its impact on financial sustainability through enhanced capabilities for electronic billing, and outlines federal Meaningful Use standards and deadlines.
- Develop a team of System Super Users that will serve as local subject matter experts and trainers to increase knowledge and use of the Netsmart system, further enhancing internal system user capacity and fully realizing system capabilities.
- Expand Metro Health's roadmap for implementing an integrated communication network by connecting disparate programs to increase the efficiency of healthcare service delivery within clinical programs (Netsmart to Starlims).

Reference

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Acknowledgements

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Metro Health would like to recognize the dedicated staff and leadership involved in the strategic planning process, without their support and commitment, this plan could not have been completed.

City of San Antonio Executive Leadership

Sheryl Sculley City Manager

Erik Walsh Deputy City Manager

Metro Health Executive Leadership

Dr. Colleen Bridger Public Health Director

*Dr. Vincent Nathan Assistant Public Health Director, Environmental Health and Safety

Division and

Interim Assistant Public Health Director, Communicable Disease

Division

Jennifer Herriott Assistant Public Health Director, Community Health Division

Paul Fenstermacher Assistant to the Director, Operations Division

Dr. Junda Woo Medical Director

- (1) Metro Health was led by Dr. Vincent Nathan as the Interim Public Health Director; he also served as the Interim Assistant Public Health Director of the Communicable Disease Division.
- (2) Roger Pollok served as the Interim Assistant Public Health Director of the Environmental Health and Safety Division as well as the Special Projects Manager of Public Health Emergency Preparedness.

Strategic Plan Steering Committee

Jennifer Herriott	Assistant Public Health Director, Community Health Division
Cara Hausler	Senior Management Analyst, Community Health Division
Claryssa Cortez	Senior Management Analyst, Performance Improvement Team
Kathleen Shields	Health Program Manager, Chronic Disease Prevention Section
Theresa Medina	Health Program Manager, Performance Improvement Team

Special thanks are offered to the Strategic Plan Steering Committee members for their dedication and leadership of our strategic planning efforts during this past year.

^{*}We would like to offer a special thank you to our executive leadership staff that led the department, prior to Dr. Bridger's arrival in March 2017. The strategic plan was created and developed from April 2016 – January 2017. During this timeframe, two staff had different roles than listed above.

Workgroups

Chronic Disease Prevention

Kathleen Shields (Co-Chair) Health Program Manager, Chronic Disease Prevention Section

Judit Vega (Co-Chair)Health Program Manager, Office of Health EquityRebeca CF BaqueroSpecial Projects Manager, Mayor's Fitness CouncilEva BoatengAmeriCorps VISTA, Community Diabetes ProgramAnayanse GarzaHealth Program Specialist, Healthy NeighborhoodsSandra HermosaManagement Analyst, Community Diabetes ProgramAnna MacnakRegistered Dietician, Chronic Disease Prevention Section

Stacy Maines Executive Assistant

Marcus Primm Senior Management Analyst, Healthy Neighborhoods
Lissette Rubio Health Program Specialist, Healthy Neighborhoods

Ellen Spitsen Senior Management Coordinator, Community Diabetes Program

Andrea Tan Health Program Specialist, Mayor's Fitness Council Lori Balderama Student Intern, Chronic Disease Prevention Section

Environmental Health and Safety

Kyle Cunningham (Co-Chair) Health Program Manager, Public Center for Environmental Health

*Roger Pollok (Co-Chair) Special Projects Manager, Public

Health Emergency Preparedness

Perla Alacron Public Health Associate, Urban Waters

Stephen Barscewski Sanitarian Services Manager, Food and Environmental Health

Linda Costley Grants Manager, Business Development

Linda Kaufman Public Health Nursing Supervisor, Public Health Emergency

Preparedness

Mycheryl Price Management Analyst, StandUpSA

Carol Schliesinger Public Relations Manager, Communications Office

Mark Wade Laboratory Manager, Laboratory Services

Communicable Disease

Rita Espinoza (Co-Chair)

Tommy Camden

Health Program Manager, Tuberculosis Program

Donnie Diaz

Senior Management Analyst, Epidemiology Program

Senior Management Coordinator, STD/HIV Program

Ronnie Gomez

Senior Administrative Assistant, Facilities Support

Health Program Manager, STD/HIV Program

Mimmy Juarez
Department Facilities Coordinator, Facilities Support
Dora Marrufo
Public Health Nursing Supervisor, Tuberculosis Program
Gloria Peregrino
Senior Management Analyst, Business Development
Community Services Supervisor, Tuberculosis Program
Pamela Williams
Senior Management Analyst, Immunizations Program
Kenya Wilson
Health Program Manager, Immunizations Program

Infrastructure

Theresa Medina (Co-Chair) Health Program Manager, Performance Improvement Team

Paul Fenstermacher (Co-Chair) Assistant to the Director, Operations Division

Ariel Bazaldua Senior Management Analyst, Performance Improvement Team
Tracie Brown Public Health Associate, Performance Improvement Team
Claryssa Cortez Senior Management Analyst, Performance Improvement Team

Linda Costley Grants Manager, Business Development

Christina Hernandez Senior Management Analyst, Performance Improvement Team

Brian Legacy Business Relationship Manager, Information Technology

Development Group

Yvonne Puente Management Analyst, Operations Division

Julie Sandoval Department Fiscal Administrator, Fiscal Operations
Ashley Steubing Health Program Manager, Business Development

Maternal, Child, and Teen Health

Rhoda Leos (Co-Chair) Management Analyst, Project Worth Program Diana Montano (Co-Chair) Assistant Social Services Manager, WIC Program Priscilla Battaglia Community Services Specialist, Healthy Start Program Kori Eberle Health Program Manager, Healthy Start Program Special Activities Coordinator, WIC Program Maria H. Martinez Mario Martinez Health Program Manager, Project Worth Program Management Analyst, Healthy Start Program Amanda Murray Christina Padilla Senior Management Analyst, Baby Café Health Program Manager, WIC Program Norma Lucia Sifuentes

Dr. Junda Woo Medical Director

Oral Health

Laura Hernandez (Co-Chair) Dental Hygienist, Head Start Program

Dr. Jennifer Meyer-Bankler (Co-Chair) Dental Clinic Director, Oral Health Program

Teresa Hines Health Program Manager, Oral Health Program
Jodie Hostetter Dental Hygienist, Miles of Smiles Program
Leslie Lara Dental Hygienist, Head Start Program

Results Based Accountability, Clear Impact Consultant

Deitre Epps

Special thanks are offered to Cara Hausler and Claryssa Cortez for their dedication in facilitating many of the workgroups across the department and coordinating much of the strategic planning efforts across the department.

Report Compiled and Prepared By

An additional thank you to Cara Hausler for her efforts to take the lead in compiling this report from the steering committee, the workgroup and section authors while coordinating input from multiple reviewers.

Appendix A: Revision History

Version	Date	Edited By	Changes
1.0	April 17, 2017	Created	Initial Document
1.1	May 25, 2017	Cara Hausler	Added Appendix D "Updated Headline Indicator Graphs"

Appendix B: Glossary

RESULTS BASED ACCOUNTABILITY ¹				
TERM	TERM DEFINITION			
Population Accountability	Population Accountability is a group of partners responsible for the well-being of a population in a geographic area. This starts by identifying a population within a specific geographic area.			
Performance Accountability	Performance Accountability is a manager or group of managers within an agency responsible for the performance of a program or service system.	-		
Priority Areas	The six categories of public health issues chosen by Metro Health staff and represented in the Strategic Plan.	Focus Area		
Result Statement	A condition of well-being for children, adults, families or communities.	Outcome; goal		
Indicator	A measure which helps to quantify the achievement of a result. Measure; benchmark			
Headline Indicator	The most important measures that rise to the top in the RBA rating process.			
Forecast	An estimate of future trends assuming the current level of effort or intervention.			
Root Cause Analysis	Analysis to help workgroups determine the factors that are causing certain health outcomes in our community. Fishbone Diag			
Prioritized Root Cause	A root cause we can influence that rises to the top in the RBA rating process.	in the		
Strategy	A coherent collection of actions that have a reasonable change of improving results (usually implemented as programs or initiatives).	Programs; initiatives; systems and services		
Performance Measure	A measure of how well a program, agency, or service system is working. The most important measures tell us whether program customers are better off.	Inputs/outputs; resources; units of service		
Action	A stepping stone that helps you implement your strategies. Specific tasks that identify the program responsible, end dates, and necessary resources. We use the SMART criteria (Specific, Measurable, Achievable, Realistic, and Time bound) to create action plans.			
Target	A specific desired future level of achievement for a headline indicator. This includes a specific number and timeframe. Measurable goal			

Access to Health is the timely use of personal health services to achieve the best health outcomes. It requires the ability to gain entry into the health care system, access a health care location where needed services are provided and finding a health care provider with whom the patient can communicate and trust.^{2,3}

Determinants of health are factors that contribute to a person's current state of **health**. These factors may be biological, socioeconomic, psychosocial, behavioral, or **social** in nature. Scientists generally recognize **five determinants** of **health** of a population: **Biology and genetics**. Examples: sex and age. **Individual behavior**. Examples: alcohol use, injection drug use, unprotected sex, and smoking. **Social environment**. Examples: discrimination, income, and gender. **Physical Environment**. Examples: where a person lives and crowding conditions. **Health services**. Examples: access to quality health care and having or not having health insurance.^{4,5}

Health is a state of complete physical, mental, and social well-being and not just the absence of sickness or frailty.^{4,6}

Health disparities are a type of difference in health that is closely linked with social or economic disadvantage. Health disparities negatively affect groups of people who have systematically experienced greater social or economic obstacles to health. These obstacles stem from characteristics historically linked to discrimination or exclusion such as race or ethnicity, religion, socioeconomic status, gender, mental health, sexual orientation, or geographic location. Other characteristics include cognitive, sensory, or physical disability.^{4,7}

Healthy equity is the attainment of the highest level of health for all people through efforts to ensure that all people have full and equal access to opportunities that enable them to lead healthy lives. Health equity can be achieved when we value all people equally, and we work across sectors to address the factors that influence health, including employment, housing, education, health care, public safety and food access. ^{8,9}

Social determinants of health are the complex, integrated, and overlapping social structures and economic systems that are responsible for most health inequities. These social structures and economic systems include the social environment, physical environment, health services, and structural and societal factors. Social determinants of health are shaped by the distribution of money, power, and resources throughout local communities, nations, and the world. 4,10

- 1. Friedman, M. (2005). Trying hard is not good enough: how to produce measurable improvements for customers and communities. Trafford.
- 2. Office of Disease Prevention and Health Promotion, Healthy People 2020. Access to Health Services. Retrieved from: https://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services
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- 4. Centers for Disease Control and Prevention. National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention Social Determinants of Health Definitions. Retrieved from: https://www.cdc.gov/nchhstp/socialdeterminants/definitions.html
- 5. U.S. Department of Health and Human Services. Healthy People 2020 Draft. (2009) U.S. Government Printing Office.
- 6. Preamble to the Constitution of the World Health Organization. (1946). N.Y., Official Records of the World Health Organization, no. 2, p. 100.
- 7. U.S. Department of Health and Human Services. Healthy People 2020 Draft. (2009) U.S. Government Printing Office.
- 8. Office of Disease Prevention and Health Promotion, Healthy People 2020. Disparities. Retrieved from: https://www.healthypeople.gov/2020/about/foundation-health-measures/Disparities
- 9. U.S. Department of Health and Human Services, Office of Minority Health. National Partnership for Action to End Health Disparities. The National Plan for Action Draft (2010). Retrieved from: http://www.minorityhealth.hhs.gov/npa/templates/browse.aspx?&lvl=2&lvlid=34.
- 10. Commission on Social Determinants of Health. Closing the gap in a generation: health equity through action on the social determinants of health (2008). Final report of the Commission on Social Determinants of Health. World Health Organization: Geneva.

Appendix C: Strategic Plan Overview



Metro Health Strategic Plan January 2017 - December 2019

Vision: Healthy people thriving in a healthy community

Mission: To prevent illness, promote healthy behaviors, and protect against health

hazards throughout our community through education, collaboration and key

services.

CoSA Core Values: 1) Teamwork 2) Integrity 3) Innovation 4) Professionalism

Common Themes: 1) Access to health care 2) Health equity 3) Alignment with community plans

Service to Our Community

Priority Area	Metro Health Indicators	Alignment with CHIP 2014 Focus Areas ¹	Alignment with SA Tomorrow
Chronic	Type 2 diabetes in adults	✓	✓
Disease	Obesity in adults	✓	✓
Prevention	Obesity in children	✓	✓
Communicable Disease	Immunizations for vaccine preventable diseases in children	✓	✓
	Tuberculosis		
	Primary and secondary syphilis (infectious stages)	✓	
Environmental	Salmonellosis (commonly transmitted through food)		✓
Health and Safety	Ozone levels		✓
	Response capacity to mosquito-borne diseases		
Maternal,	African-American infant deaths	✓	
Child, and Teen Health	First trimester pregnancy care	✓	
	Repeat teen births	✓	✓
Oral Health	History of dental cavities in children		
Oral Health	Dental sealants in children (protection from cavities)		

Service to Our Staff

Priority Area	Performance Indicators
Organizational Infrastructure	Workforce development for current and future staff
	Agency wide performance management and quality improvement Health information technology and security

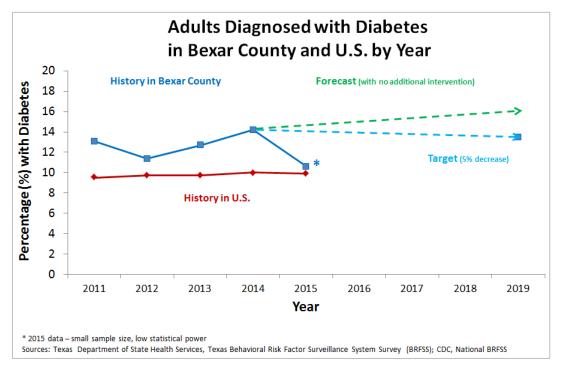
^{1.} In partnership with the Bexar County Health Collaborative, Metro Health is leading the development process of a new Community Health Improvement Plan (CHIP) for 2017. The CHIP includes stakeholders from across the public, private, and nonprofit sectors and will provide strategic direction for our community over the next three years.

Appendix D: Updated Headline Indicator Graphs

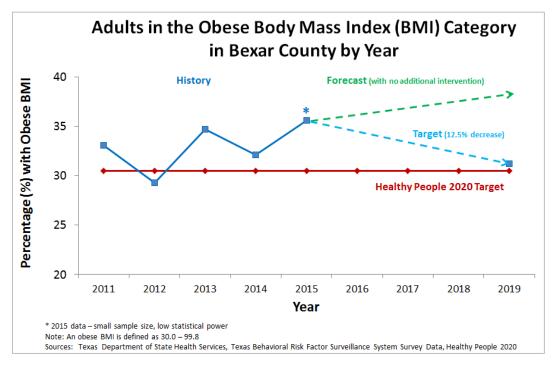
Since the original version of our strategic plan was created new data became available for seven headline indicators. We added the new data to our headline indicator graphs and adjusted the forecast and target lines accordingly. The updated graphs are below for these seven headline indicators: type 2 diabetes in adults, obesity in adults, immunizations for vaccine preventable diseases in children, ozone levels, African-American infant deaths, first trimester pregnancy care, and repeat teen births.

Regarding the first two graphs, although it appears that the rate declined for type 2 diabetes and increased for obesity in adults from 2014 to 2015, it is important to note that the sample sizes were different. The survey sample size for both in 2014 was 1,500; three times larger than the sample size of 500 in 2015.

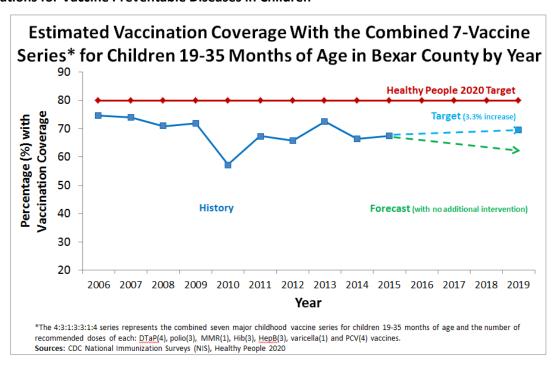
Type 2 Diabetes in Adults



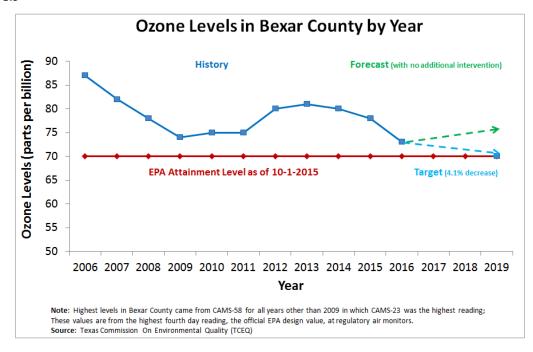
Obesity in Adults



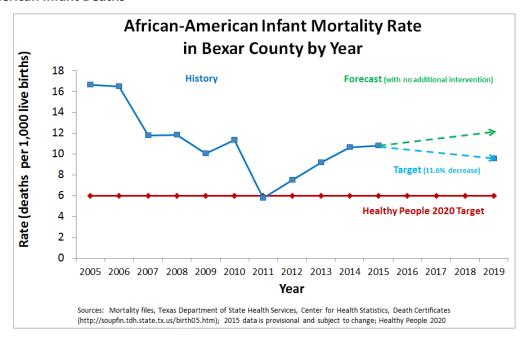
Immunizations for Vaccine Preventable Diseases in Children



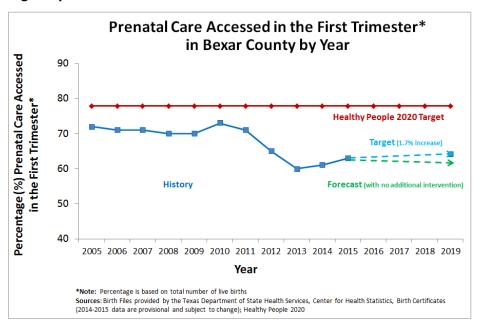
Ozone Levels



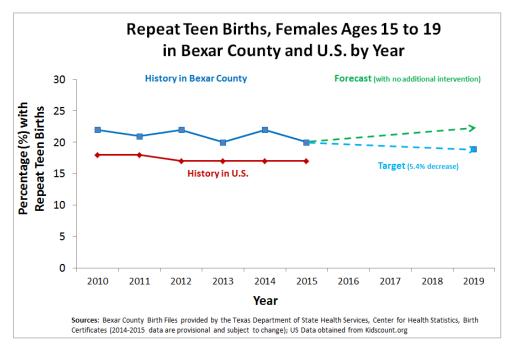
African-American Infant Deaths



First Trimester Pregnancy Care



Repeat Teen Births





This document was prepared by:
The Metro Health Strategic Plan Steering Committee.